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QUALIFICATION TESTING OF THE CNU-480/E CONTAINER FOR THE SMAW(HEAA) ROCKET

HQ AFLC/DSTZT
AIR FORCE PACKAGING EVALUATION AGENCY
WRIGHT-PATTERSON AFB, OH 45433-5999

December 1990

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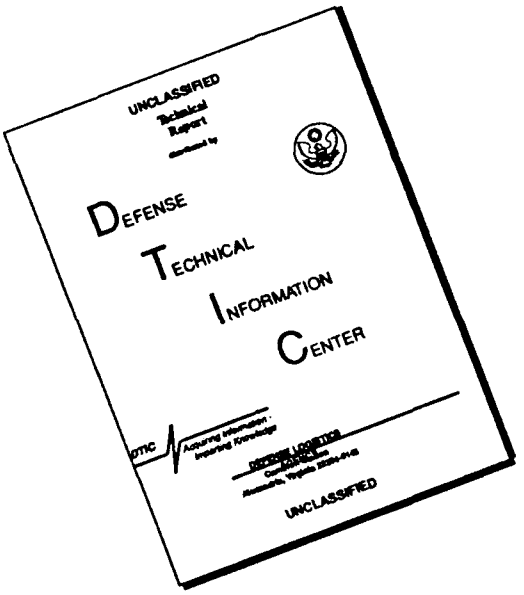

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PROJECT NO. 90-P-105

TITLE: Qualification testing of the CNU-480/E Container

ABSTRACT

The objective of this test series is to qualify the CNU-480/E SMAW High Explosive Anti-Armor(HEAA) rocket container for production release by MSD/YJA. The CNU-480/E container is a welded aluminum, controlled breathing style with a removable cover. The container is designed to hold four HEAA rockets in two layers constrained in conformal cavities in polyethylene tray and cover cushions. The qualification test series is derived from MIL-STD-648A and FED-STD-101C and consists of -25 and +140 F free fall drop tests, sinusoidal and repetitive shock vibration tests, structural strength tests, and leak tests. The test series was performed at the Air Force Packaging Evaluation Activity, Wright-Patterson AFB, Ohio.

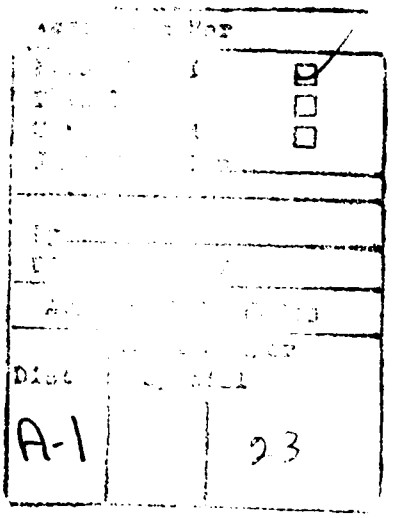

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TABLE OF CONTENTS

APPENDICES

INTRODUCTION

The objective of this test series is to qualify the CNU-480/E container for production release by MSD/YJA. The tests performed are specified by MSD/YJA, Eglin AFB, FL in the Test Plan (Attachment 1) and are derived from MIL-STD 648A and Fed-Std-101C. The test methods constitute both procedure for performing the tests and performance criteria for evaluating container acceptability. The tests are commonly applied to special packaging containers providing shock and vibration protection to sensitive items. The facilities at which the tests were performed are located at the Air Force Packaging Evaluation Activity, Wright-Patterson AFB, OH.

ITEM DESCRIPTION

The CNU-480/E container is a welded aluminum, controlled breathing style with a removable cover. Container sides are fabricated from double walled aluminum extrusions. Top and bottom are aluminum sheet. Closure is achieved by four toggle mechanism latches. Shock and vibration isolation is provided by polyethylene foam cushions fabricated from sheet to form two trays and a cover. The container is designed to hold four high explosive anti-armor SMAW (HEAA) rockets in two layers constrained in conformal cavities in the trays and cover. Exterior dimensions are length 46.5 inches, width 20.5 inches, and depth 15.5 inches. Loaded gross weight is 136 pounds. The container tested and the four HEAA rockets were provided by MSD/YJA.

INSTRUMENTATION

The upper starboard and lower port rockets were instrumented with triaxial piezoelectric accelerometers located on the protective plastic nose cover. The accelerometer location was 3 inches from the cover forward end, 1/2 inch above the rocket centerline, and 2 inches offset transversely from the rocket centerline and toward the container interior. Accelerometer principal axes were aligned parallel and perpendicular to the rocket centerline. With respect to container faces, the accelerometer principal axes were perpendicular to the faces in the following table:

Container Face Identification		Accelerometer Axis	Axis and Channel Identification Upper Starboard	Lower Port
1	Top	Vertical	1	6
2	Port	Transverse	3	7
3	Bottom	Vertical	1	6
4	Starboard	Transverse	3	7
5	Forward	Longitudinal	2	5
6	Aft	Longitudinal	2	5

The accelerometer output was amplified by an Endevco model 2740B charge amplifier. The signal was recorded and processed by a GHI Systems Triads II E data acquisition system. Prior to test, the system calibration was determined to be within ± 5 percent of input by inserting a known charge into each charge amplifier and then reading the associated Triads II E channel response. As a final product, the Triads II E printed graphic amplitude-time traces with computed resultant of the orthogonal components and peak accelerations of both resultant and components.

TEST EQUIPMENT

The following instrumentation and equipment were used in this test:

Item	Manufacturer	Model	Serial	Cal Exp.
Data Acquisition Sys	GHI Systems	Triads II	M00914451	29 Jan 91
Charge Amplifier	Endevco	2740B	FW28	6 Oct 90
Charge Amplifier	Endevco	2740B	FW10	11 Nov 90
Charge Amplifier	Endevco	2740B	FY65	3 Aug 90
Charge Amplifier	Endevco	2740B	FW07	3 Aug 90
Charge Amplifier	Endevco	2740B	FY49	3 Aug 90
Charge Amplifier	Endevco	2740B	FW23	4 Aug 90
Accelerometer	Endevco	2223D	FE97	8 Mar 91
Accelerometer	Endevco	2223D	FE53	7 Mar 91
Vibration Meter	L.A.B. Div.	487A02	0068	25 Dec 90
Vibration Machine	L.A.B. Div.	41012	89003	N/A
Vibration Machine	L.A.B. Div.	5000-96B	56801	N/A
Storage Oscilloscope	Tektroniks	5115	B094122	7 Oct 90
Test Cham -40, 165 F	Envirotronics		A088843	4 Aug 91
Test Cham -100, 375 F	Tenney Eng		BH1138	25 Nov 90
Manometer, 0-60 in H_2O	Meriam Inst.	30EB25IM	154591	N/A
Halogen Leak Detector	General Elec	42081	9M09	N/A
Vacuum Pump	Precision			
Drop Test Machine	L.A.B. Div.			
Dynamometer	WC Dillon & Co	5000	AN20058	25 Sep 91
Dynamometer	Chatillon	160	A082647	21 Jun 92
Scale 2000 lbs.	Howe		A057229	4 Dec 90

TEST PROCEDURE

The containers with the four HEAA rockets as provided by MSD/YJA were tested in accordance with the MSD/YJA test plan and referenced methods of MIL-STD 648A and Fed-Std-101C, except as stated herein. All leak tests were performed with the four HEAA rockets and two polyethylene cushion trays removed because either the polyethylene or rockets absorbed compressed air and thereby interfered with the test. For Fed-Std-101C, Method 5019.1, the container was vibrated on the bottom, port, and aft faces for one hour per face instead of on all six faces for thirty minutes per face because other orientations would have interfered with the accelerometers due to lack of clearance.

CONCLUSIONS AND RESULTS

Test Sequence 1, MIL-STD-648A, 5.1.2, Form and Fit Test.

The four rockets were removed from the fully assembled closed CNU-480/E container at room temperature in 21 seconds without adverse impediments or the use of tools by two personnel. The four rockets were returned to the container which was assembled and closed without unreasonable difficulty. The CNU-480/E container complies with the requirements of 5.1.2 and the requirement that total breakout time shall not exceed 4 man-minutes.

Test Sequence 2, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

The CNU-480/E container without the four rockets and two polyethylene trays incurred a leak rate of 0.00 psi per hour when pressurized to 1.5 psig internal pressure for two hours. The CNU-480/E container complies with the requirement that the maximum leak rate shall not exceed 0.050 psi per hour.

Test Sequence 3, MIL-STD-648A, 5.3.2, Resonance Strength and Dwell Test, -25 Degrees Fahrenheit.

Post-test inspection indicated that neither the CNU-480/E container nor the four rockets incurred damage detectable by visual inspection. The rockets were adequately constrained without shifting or rotation by the polyethylene trays. Resonant transmissibility is reported in Appendix 3, but no performance requirement is stated in the Test Plan. The CNU-480/E container complies with the requirements of 5.3.2.

Test Sequence 4, MIL-STD-648A, 5.3.2, Resonance Strength and Dwell Test, +140 Degrees Fahrenheit.

Post-test inspection indicated that neither the CNU-480/E container nor the four rockets incurred damage detectable by visual inspection. The rockets were adequately constrained without shifting or rotation by the polyethylene trays. Resonant transmissibility is reported in Appendix 3, but no performance requirement is stated in the Test Plan. The CNU-480/E container complies with the requirements of 5.3.2.

Test Sequence 5, Examination.

Visual inspection of the container, cushion pads, and rockets indicated:

a. The four rockets were as initially positioned and undamaged.

b. The cushion trays were undamaged.

c. Container closure latches were closed.

d. No visible cracks in container welds were present.

e. No apparent damage to the container was present.

Test Sequence 6, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

Initially, the CNU-480/E container without the four rockets and two polyethylene trays incurred a leak rate of 0.079 psi per hour when pressurized to 1.5 psig internal pressure for 30 minutes. As removal of the rockets and trays may have caused closure gasket contamination with powdered polyethylene, the gasket and mating surfaces were carefully cleaned. Retest indicated a leak rate of 0.0036 psi per hour at 1.5 psig for 30 minutes. The CNU-480/E container complies with the requirement that the maximum leak rate shall not exceed 0.050 psi per hour.

Test Sequence 7, Fed-Std-101C, Method 5019.1, Vibration (Repetitive Shock) Test.

After 1 hour vibration at 4.5 Hz and 1.0 inch DA input for the bottom and port side faces and at 4.8 Hz and 1.0 inch DA input for the aft end face, post-test inspection indicated that no damage was incurred by the container, cushioning, or rockets. All closure latches remained closed. The four rockets did not shift or rotate. Acceleration response levels of the rockets are listed in Appendix 3. The container complies with the performance requirements implied by Method 5019.1.

Test Sequences 8 and 9, Fed-Std-101C, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, +140 Degrees Fahrenheit.

After conditioning at +140 degrees Fahrenheit for 24 hours, the container received 18 inch free fall drops at +140 degrees Fahrenheit on two diagonally opposite corners, the base, and port side. Only minor deformation resulted on impacted corners. The rockets did not shift or rotate. Closure latches remained closed. Neither the container, cushion trays, nor the rockets incurred damage. Rocket acceleration responses are listed in Appendix 3 and excessively exceeded the values obtained by MSD/YJA for ambient temperature drop testing of the old style wood container with 5 SMAW rockets and similar cushion trays designed for 3 SMAW rockets each. One of the acceptability criteria imposed by MSD/YJA is that the new aluminum CNU-480/E

container not exceed the drop test peak accelerations of the old style wood container so that performance equivalence of the two containers could be established.

Test Sequences 10 and 11, Fed-Std-101, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, -25 Degrees Fahrenheit.

After conditioning at -25 degrees Fahrenheit for 24 hours, the container received 18 inch free fall drops at -25 degrees Fahrenheit on another set of diagonally opposite corners, top, and forward end side. Only minor deformation resulted on impacted corners. Drops did not cause weld cracks or holes in the container. The rockets did not shift or rotate. Closure latches remained closed. Neither the container, cushion trays, nor the rockets incurred damage. Rocket acceleration responses are listed in Appendix 3 and excessively exceeded the values obtained by MSD/YJA for ambient temperature drop testing of the old style wood container with 5 SMAW rockets and similar cushion trays designed for 3 SMAW rockets each. One of the acceptability criteria imposed by MSD/YJA is that the new aluminum CNU-480/E container not exceed the drop test peak accelerations of the old style wood container so that performance equivalence of the two containers could be established.

Test Sequence 12, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

The CNU-480/E container without the four rockets and two polyethylene trays incurred a leak rate of 0.029 psi per hour when pressurized to 1.5 psig internal pressure for 1.25 hours. The CNU-480/E container complies with the requirement that the maximum leak rate shall not exceed 0.050 psi per hour.

Test Sequence 13, Examination.

Visual inspection of the container, cushion trays, and rockets performed prior to the leak test indicated:

a. The four rockets were as initially positioned prior to the drop tests and undamaged.

b. The cushion trays were undamaged.

c. All container latches were closed.

d. No visible cracks in container welds or holes were present.

e. No damage to the container was present.

Test Sequence 14, Fed-Std-101C, Method 5016.1, Superimposed Load Test.

When loaded with a stacking load of 3063 pounds uniformly distributed over dunnage on the container top for 1 hour and 7 minutes at ambient temperature, the CNU-480/E container incurred no damage or permanent deformation. Dimensional test data is listed in Appendix 3. The four rockets inside incurred no damage. The container remained functional; therefore, it complies with the implied performance requirements of Method 5016.1.

Test Sequence 15, MIL-STD-648A, 5.8.3, Hoisting Fittings Strength Test.

With a uniformly distributed load of 542 pounds centered on the container top, the container was hoisted by straps attached at two points on each of the two handles for 10 minutes. Post-test inspection indicated no damage or deformation of the container. The container complies with the performance requirement implied by 5.8.3.

Test Sequence 16, MIL-STD-648A, 5.8.5, Single Hoisting Fitting Strength Test.

The container was hoisted by straps attached at two points on the aft handle for 5 minutes, and then by the forward handle for 5 minutes. Post-test inspection indicated no damage or deformation of the container. The container complies with the performance requirement implied by 5.8.5.

Test Sequence 17, MIL-STD-648A, 5.4.8, Tiedown Strength Test.

The CNU-480/E container was placed on a plywood base supported by orthogonal rollers bearing in a horizontal steel welding table. The container was secured by the two base handles with chain, so that four point loading with the angle of restraint being 45 degrees from the horizontal and 45 degrees outboard from the container surface resulted. A forward directed tensile load of 410 pounds and a lateral tensile load of 200 pounds was applied to the container base along the respective centerlines for 2 minutes. The container was rotated 180 degrees and an aft directed tensile load of 450 pounds and a lateral tensile load of 204 pounds was applied to the container base along the respective centerlines for 1 minute. Post-test inspection indicated no damage or deformation of the container. The CNU-480/E container complies with the performance requirements implied by 5.4.8.

Test Sequence 18, Examination.

Visual inspection of the container, cushion trays, and rockets performed after the tiedown strength test indicated:

a. The four rockets did not shift or rotate or incur damage.

b. The cushion trays were undamaged.

c. All container latches were closed.

d. Container welds were not cracked or broken.

e. Minor deformation of drop test impacted corners was present.

f. No visibly apparent damage to the container that would impair functionality was present.

Test Sequence 19, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

The CNU-480/E container without the four rockets and two polyethylene trays incurred a leak rate of 0.036 psi per hour when pressurized to 1.5 psig for 1 hour. The CNU-480/E container complies with the requirement that the maximum leak rate shall not exceed 0.050 psi per hour.

Test Sequence 20, MIL-STD-648A, 5.5.2, Structural Integrity Test.

The loaded CNU-480/E container was pressurized to +2.0 psig for 15 minutes, then it was depressurized to a vacuum of -1.5 psig for 15 minutes. Post-test inspection indicated that the container incurred no failure of closure latches or gasket, damage, or deformation sufficient to prevent removal of the contents. The CNU-480/E container complies with the performance requirement implied by 5.5.2.

Test Sequence 21, TP-HEA-008, Transportation Drop Test.

The fully loaded CNU-480/E container was dropped from 7 feet onto a concrete floor so that its base impacted parallel to the floor. Visual inspection indicated that neither the container, cushion trays, or rocket incurred damage. The rockets remained as initially positioned. All latches remained closed and could be freely opened. No weld cracks or holes were visually apparent. Minor but not critical deformation of corner 2-3-6 resulted. The CNU-480/E container complies with the performance requirement implied by the 7 foot Transportation Drop Test.

Test Sequence 22, Fed-Std-101C, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, Ambient Temperature.

To develop valid acceptability criteria, the CNU-480/E container was given the drop test of test sequences 8,9,10,and 11 at ambient temperature so that similar drop test data for the old SMAW wood container could be reasonably compared with the CNU-480/E container drop test data. Test parameters drop height 18 inches, temperature ambient, and acceleration data low pass filter frequency 125 Hz for both data sets are then identical. As the 125 Hz -3 db low pass filter frequency is considered too low to adequately pass the drop test complex acceleration pulse, the CNU-480/E drop test data was also filtered at a low pass filter frequency of 290 Hz - db. For the CNU-480/E container, the drop test complex acceleration pulses contain superposed components of 120 to 125 Hz which were the rotational suspension modes of the rocket about the vertical and transverse axes and of 111 to 125 Hz which were the circumferential or radial vibration modes of the launcher tube. To a lessor degree, the old style wood container drop test data also contained these superposed components; therefore, selected large amplitude drop pulses were also filtered at a low pass filter frequency of 290 Hz -3 db. Relative comparison of the four sets of ambient temperature drop test data was made.

For the CNU-480/E drop test data, less difference between -25 degrees Fahrenheit, ambient, and +140 degrees Fahrenheit data was observed than was expected. The large peak amplitude and lack of temperature dependence of the CNU-480/E data is attributed to the dominant suspension rotational modes of the rockets which are strongly coupled with one another and with the launcher tubes coincident 111 to 125 Hz circumferential or radial modes. A mechanical system containing strongly coupled multiple resonant modes of approximately the same or harmonically related resonant frequencies is extremely response sensitive to initial conditions and excitation. While the old style wood container drop test data exhibited some coupled resonant response, the coupling was less and the resonances not so sharply tuned; therefore, the peak accelerations were less. Irrespective of how filtered, CNU-480/E ambient temperature drop test data excessively exceeded the peak acceleration response of the old style SMAW wood container ambient temperature drop test data. The CNU-480/E container does not provide as much shock isolation protection to the SMAW(HEAA) rockets as does the old style wood box container. As no acceleration fragility ratings are available for the SMAW(HEAA) rocket, comparing item drop test response to its fragility rating can not be used as an evaluation criteria for the CNU-480/E container.

RECOMMENDATIONS

In order to establish performance equivalence, MSD/YJA imposed the acceptability criteria that the CNU-480/E container drop test

peak acceleration must not exceed corresponding values for the old style wood container. For at least two drops, the bottom and port side, CNU-480/E ambient temperature drop test peak acceleration filtered at 125 Hz low pass unacceptably exceeded corresponding values for the old style wood container. As cushioning drop test data is temperature dependent, error due to the difference induced by the temperature difference will result when two drop test data sets are compared. CNU-480/E, +140 degrees Fahrenheit drop test peak acceleration filtered to the same low pass filter frequency for the bottom and port side drops also unacceptably exceeded ambient temperature values for the old style wood container. While at different test temperature and low pass filter frequency which are factors tending to relatively increase the differences, all values of CNU-480/E -25 degrees Fahrenheit drop test peak accelerations unacceptably exceed the ambient temperature values for the old style wood container. Due to the large magnitudes of the drop test peak accelerations and the obvious presence of multiple strongly coupled suspension resonant modes tending to peak acceleration response, DSTZT recommends additional effort be made to reduce CNU-480/E container drop test peak accelerations to the levels of the old style wood container. Peaking acceleration responses can readily be reduced by detuning and decoupling the suspension resonant modes of the four rockets. To decouple suspension resonant modes, DSTZT recommends that the rockets currently with centerlines lying in a vertical plane be staggered in the container width dimension so that at least 2 inches separates the vertical planes containing a rocket centerline. To detune suspension and launcher tube resonant modes, DSTZT recommends that the cushioning material bearing on the launcher tube be undercut for a distance of .26 times the launcher tube length from the launcher tube aft end to provide 1/4 inch clearance between the launcher tube and the cushion material.

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APPENDIX 1

TEST PLAN

TEST PLAN

High Explosive Anti Armor (HEAA) Rocket
Shipping and Storage Container (CNU-480/E)

1.0 OBJECTIVE

The objective of these tests is to qualify the CNU-480/E Container for production release. The tests specified herein are in compliance with Specification Number SP8982830.

2.0 DESCRIPTION

The container is a welded-aluminum, controlled-breathing style with a removable cover. It is designed to hold four high explosive anti-armor (HEAA) rockets. Shock vibration isolation is provided by polyethylene foam cushions. The container is 46 X 20.5 X 16 with a gross weight of 135 pounds.

3.0 PASS/FAIL CRITERIA

The pass/fail criteria for the following tests will be in accordance with the referenced test method, unless otherwise specified.

4.0 TEST SEQUENCE NUMBER AND DESCRIPTION

Unless otherwise specified, the sequence of the tests will be as specified in Table I. The YJEM test engineer may authorize deviations to expedite the test series.

5.0 INSTRUMENTATION

Instrument the lower port rocket and the upper starboard rocket each with a triaxial accelerometer, positioned on the rocket container cap. Capture and record each shock and vibration response during the test series.

6.0 TEST FACILITY AND REPORT

The tests, as listed in Table I, will be conducted by the Air Force Packaging and Evaluation Agency (AFPEA). A published test report will be prepared and submitted to the Packaging Engineering Division (YJEM), Eglin AFB FL, within 60 days after test completion. The report will contain, but is not limited to, tests conducted, criteria, test set-up (with photographs or illustrations, as appropriate), tests conditions, and pass/fail analysis (with photographs, as appropriate).

TABLE I

TEST SEQUENCE NUMBER AND DESCRIPTION

SEQ. NO.	DESCRIPTION	STD	METHOD/ PARA	TEMP ^{O}F
1	FIT TEST: Load container with four HEAA rockets. There can be no fit or assembly problems. Open and unload a fully loaded container using a two man crew. Total breakout time shall not exceed 4 man-minutes.	MIL-STD-648A	5.1.2	AMB.
2	LEAK TEST - Pressurize to 1.5 psig and monitor loss for 15 min. If no loss, terminate test. If loss, continue for a total time of 60 min. Maximum loss is not to exceed .040 psig.	FTMS-101C	5009.1 6.3	AMB.
3	VIBRATION - Perform three sweeps on the three major axes as follows: Sweep 5 to 50 Hz at .5 oct/min. Input levels are 5-12.5 Hz .125 inch D.A. and 12.5-50 Hz 1.0g. Locate and dwell at the peak resonance for 10 min. Total test time shall be 30 min.	MIL-STD-648A	5.3.2	-25
4	VIBRATION - Perform three sweeps on the three major axes as follows: Sweep 5 to 50 Hz at .5 oct/min. Input levels are 5-12.5 Hz .125 inch D.A. and 12.5-50 Hz 1.0g. Locate and dwell at the peak resonance for 10 min. Total test time shall be 30 min.	MIL-STD-648A	5.3.2	+140
5	EXAMINATION - Inspect container and contents for damage.	N/A	N/A	AMB.
6	LEAK TEST - Same conditions as Test No. 2.	FTMS-101C	5009.1 6.3	AMB.

TABLE I (cont'd)

TEST SEQUENCE NUMBER AND DESCRIPTION

SEQ. NO.	DESCRIPTION	STD	METHOD/ PARA	TEMP °F
7	LOOSE CARGO VIBRATION - 1.3 to 1.5g at 5.5 Hz for 3 hours. At the end of each half-hour period turn the package to test on a different face, so that at the end of the three-hour period the test item will have been tested on each of its six faces.	FTMS-101C	5019.1	AMB.
8	CORNERWISE DROP (FREE FALL) TEST - Two diagonally opposite corners at 18 inches. Level A protection.	FTMS-101C	5007 6.3 Procedure G	+140
9	FLAT DROP (FREE FALL) TEST - Flat drop on container base and one adjacent side at 18 inches. Level A protection.	FTMS-101C	5007 6.3 Procedure G	+140
10	CORNERWISE DROP (FREE FALL) TEST - Same conditions as No. 8 with remaining corners.	FTMS-101C	5007 6.3 Procedure G	-25
11	FLAT DROP (FREE FALL) TEST - Flat drop on container top and any adjacent side other than in Test No. 9.	FTMS-101C	5007 6.3 Procedure G	-25
12	LEAK TEST - Same conditions as Test No. 1.	FTMS-101C	5009.1 6.3	AMB.
13	EXAMINATION - Inspect container and contents for damage.	N/A	N/A	AMB.
14	SUPERIMPOSED-LOAD TEST - Load container to 3,038 pounds.	FTMS-101C	5016.1	AMB.
15	HOISTING FITTING STRENGTH TEST - Place a 540 pound load on the loaded container, lift off the floor using the two handles and hang for 5 minutes. There can be no permanent deformation or damage.	MIL-STD-648A	5.8.3	AMB.

TABLE I (cont'd)

TEST SEQUENCE NUMBER AND DESCRIPTION

SEQ. NO.	DESCRIPTION	STD	METHOD/ PARA	TEMP ^{o}F
16	SINGLE HOISTING FITTING STRENGTH TEST	MIL-STD-648A	5.8.5	AMB.
17	TIEDOWN STRENGTH TEST: Secure the container using the two base handles, so that four point loading is used. The angle of restraint shall be 45^{o} from the horizontal and 45^{o} outboard from the container surface. Apply the following loads for 1 minute. There shall be no damage or permanent deformation. Forward 405 pounds Lateral 202 pounds	MIL-STD-648A	5.8.4	AMB.
18	EXAMINATION - Inspect container and contents for damage.	N/A	N/A	AMB.
19	LEAK TEST - Same conditions as Test No. 2.	FTMS-101C	5009.1 6.3	AMB.
20	STRUCTURAL INTEGRITY TEST: Apply a pressure of +2.0 psig and a vacuum of -1.5 psig to the container. There shall be no damage or permanent deformation.	MIL-STD-648	5.5.2	AMB.
21	TRANSPORTATION DROP - 7 feet onto container base.	TP-HEA-008		AMB.

APPENDIX 2

FIGURES

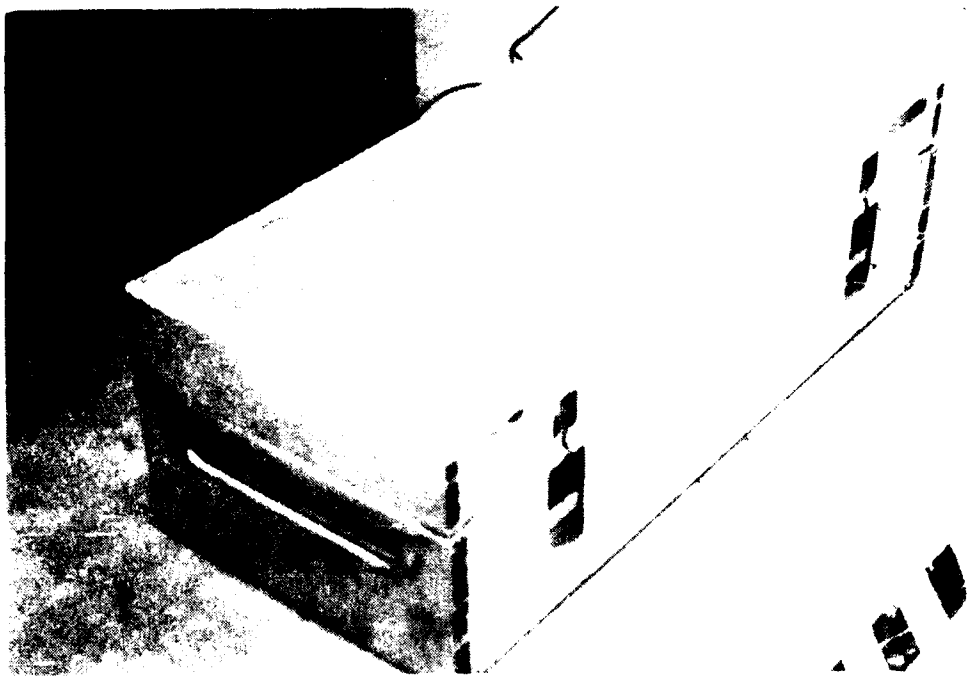


Figure 1. CNU-480/E Container.

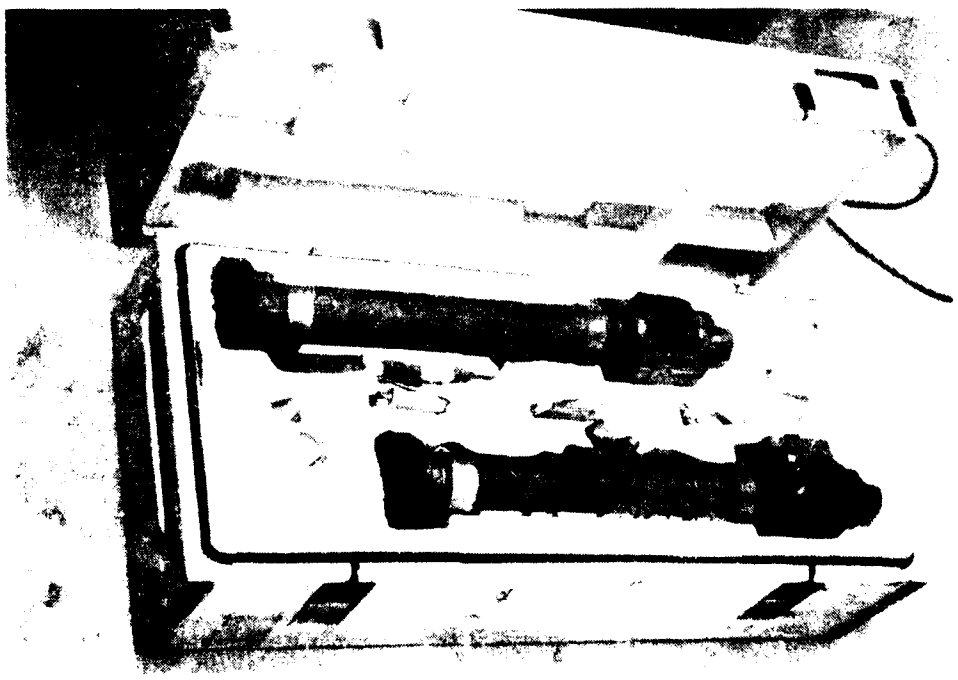


Figure 2. CNU-480/E Container. Upper HEAA Rocket Tier.

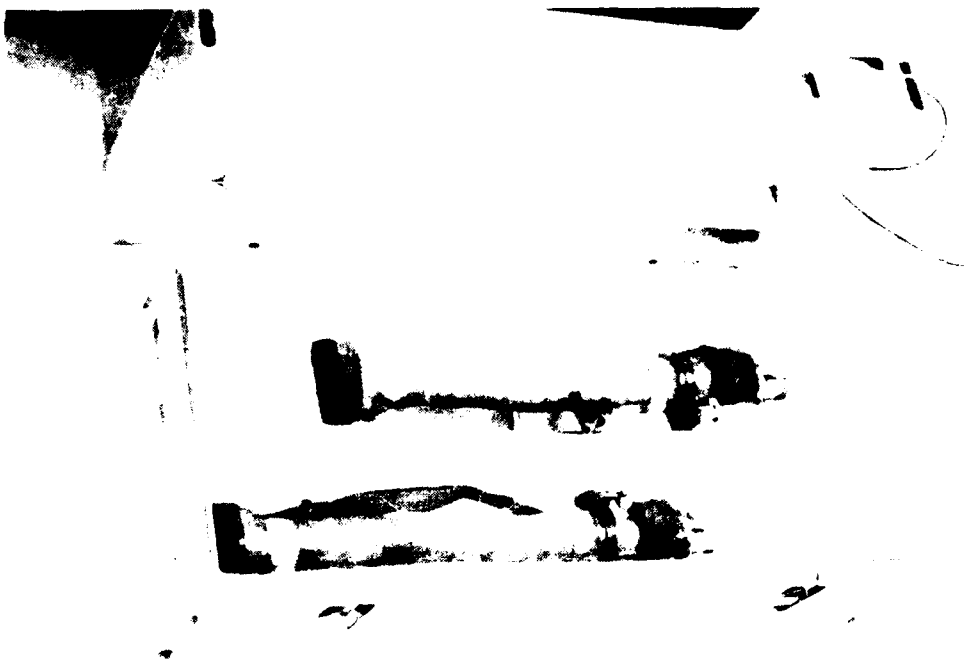


Figure 3. CNU-480/E Container. Lower HEAA Rocket Tier.

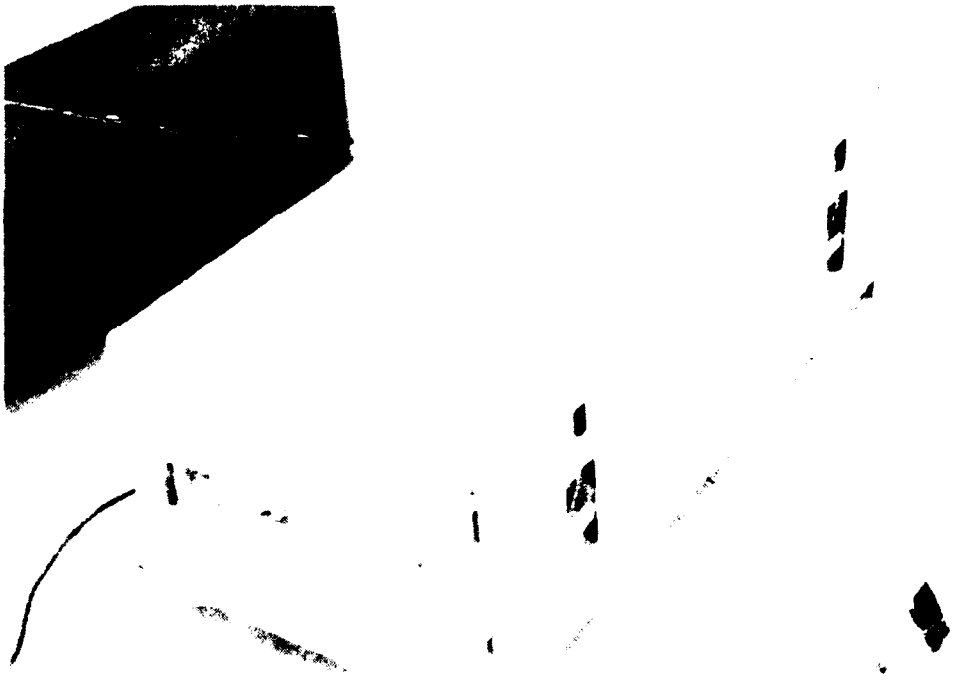


Figure 4. Leak Test and Structural Integrity Test.

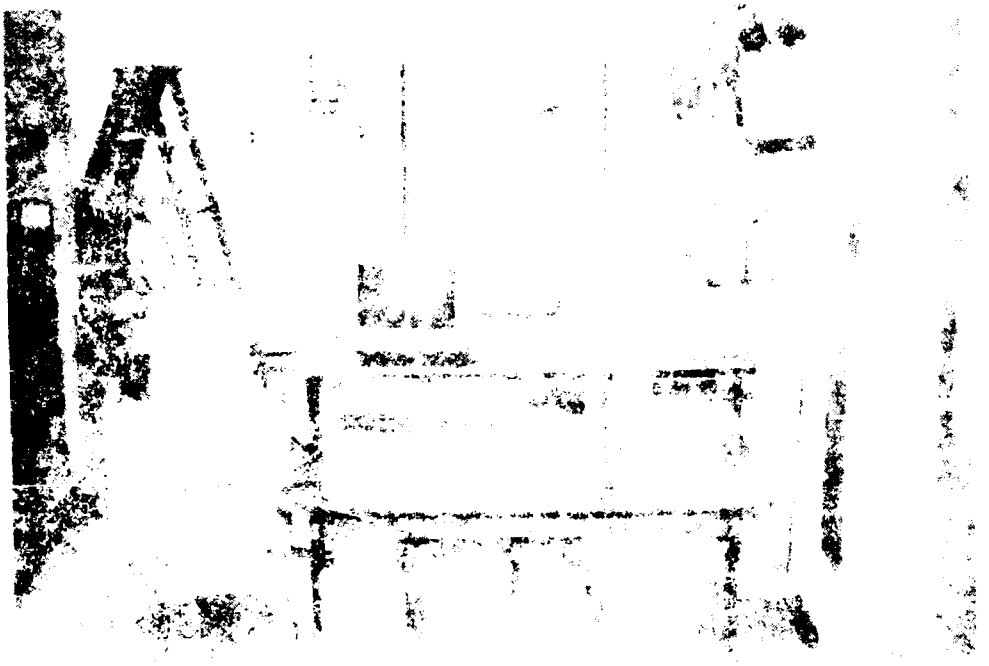


Fig... ...ion System,
Cha... ...ne Control
Con...

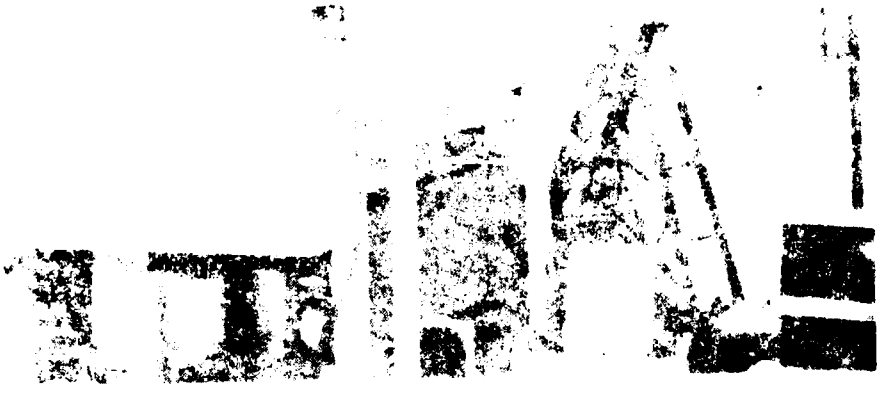
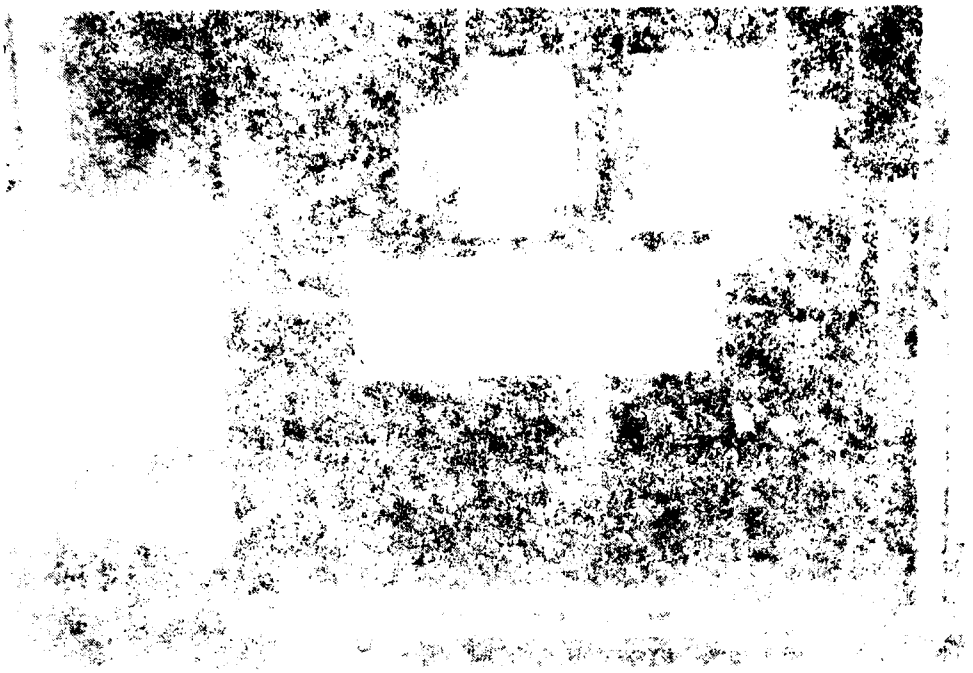


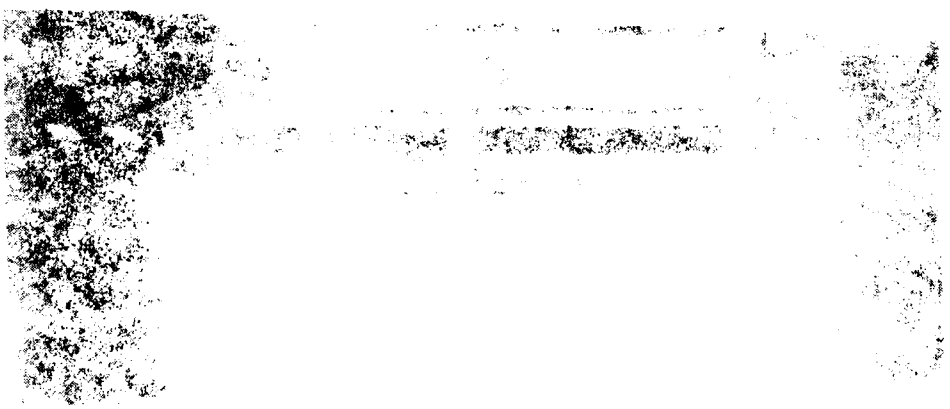
Fig... ... and Environmental
Cha...

Axis.

ottom Face.



Drop on Base.



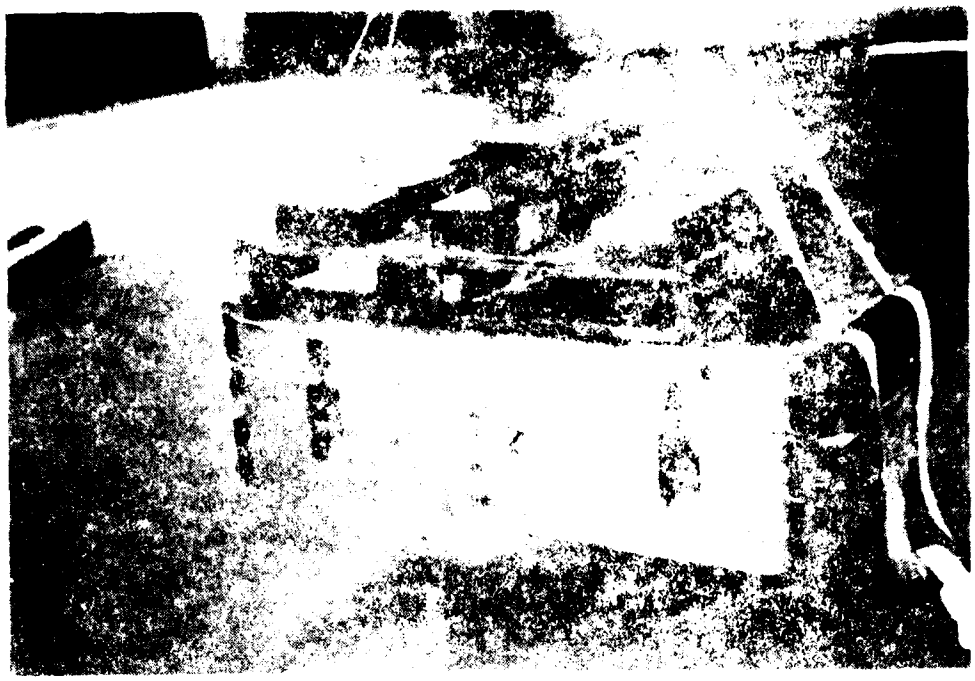


Figure 11. [illegible] Test.

Figure 12. [illegible] Test

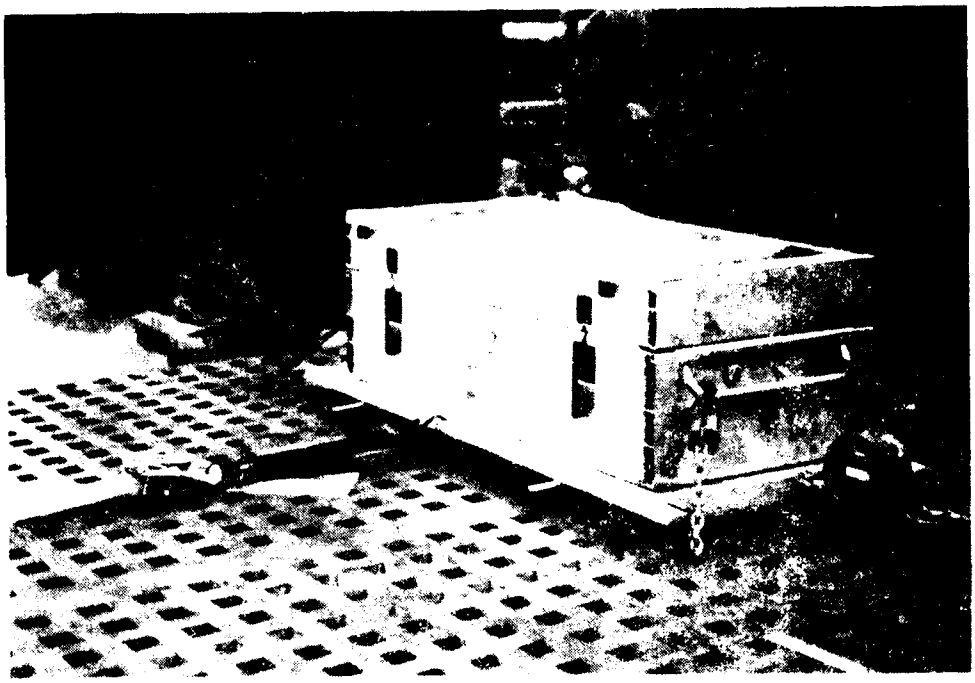


Figure 13. Tiedown Strength Test.

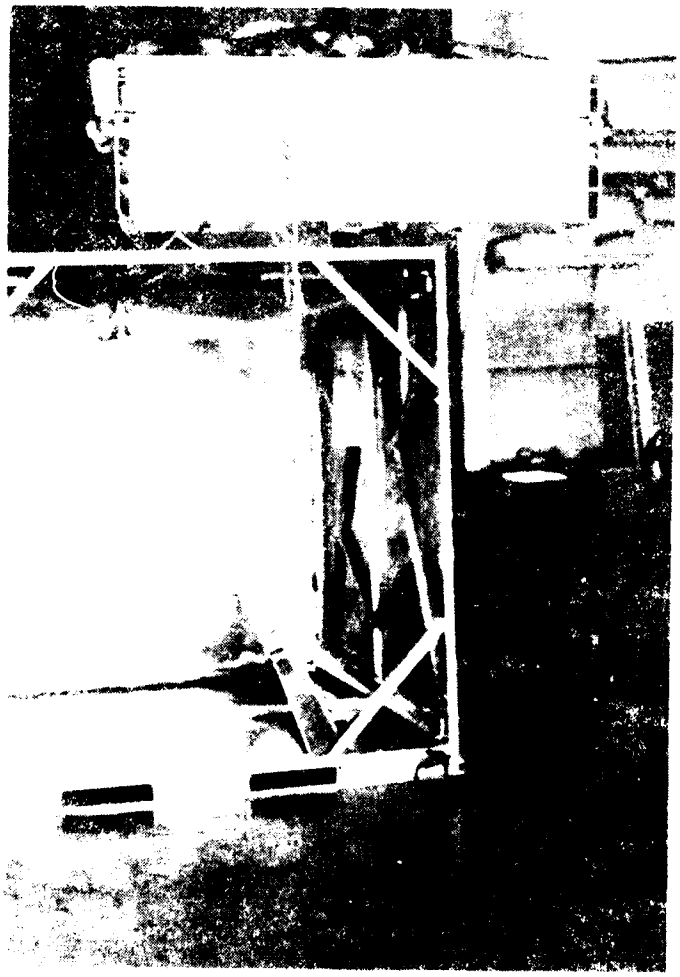


Figure 14. 7 Foot Transportation Drop Test.

APPENDIX 3

TEST DATA

Test Sequence 2, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

Test Time Minutes	Test Pressure In Water (psig)	Leak Rate Psi Per Hour
0	45.1 (1.63)	---
60	44.9 (1.62)	0.0072
90	45.1 (1.63)	0.000

Test Sequence 3, MIL-STD-648A, 5.3.2, Resonance Strength and Dwell Test, Resonance Dwell, -25 Degrees Fahrenheit.

Container Axis	Table Input Time Min	Freq Hz	Disp In DA	Accel Gpp	Resonant Response Upper Accel Gpp	Stbd Trans	Lower Accel Gpp	Port Trans
Vertical	4	16.1	--	2.0	8.8	4.4	6.6	3.3
Vertical	9	16.1	--	1.98	10.7	5.4	7.0	3.5
Vertical	10	16.1	--	1.98	--	--	--	--
Transverse	2	15.0	--	2.0	17.2	8.6	13.5	6.8
Transverse	9	15.0	--	2.0	18.0	9.0	15.2	7.6
Transverse	10	15.0	--	2.0	--	--	--	--
Longitudinal	1.5	11.5	.125	1.7	17.8	10.5	18.2	10.7
Longitudinal	8	10.1	.125	1.3	13.3	10.2	14.2	10.9
Longitudinal	10	10.1	.125	1.3	--	--	--	--

Note: Prior to resonance dwell, each container axis was swept over the frequency range 5-50 Hz at a rate of 2 minutes per octave for 7.5 minutes with an input of 0.125 inches DA from 5 to 12.5 Hz and 1.0 Gp from 12.5 to 50 Hz.

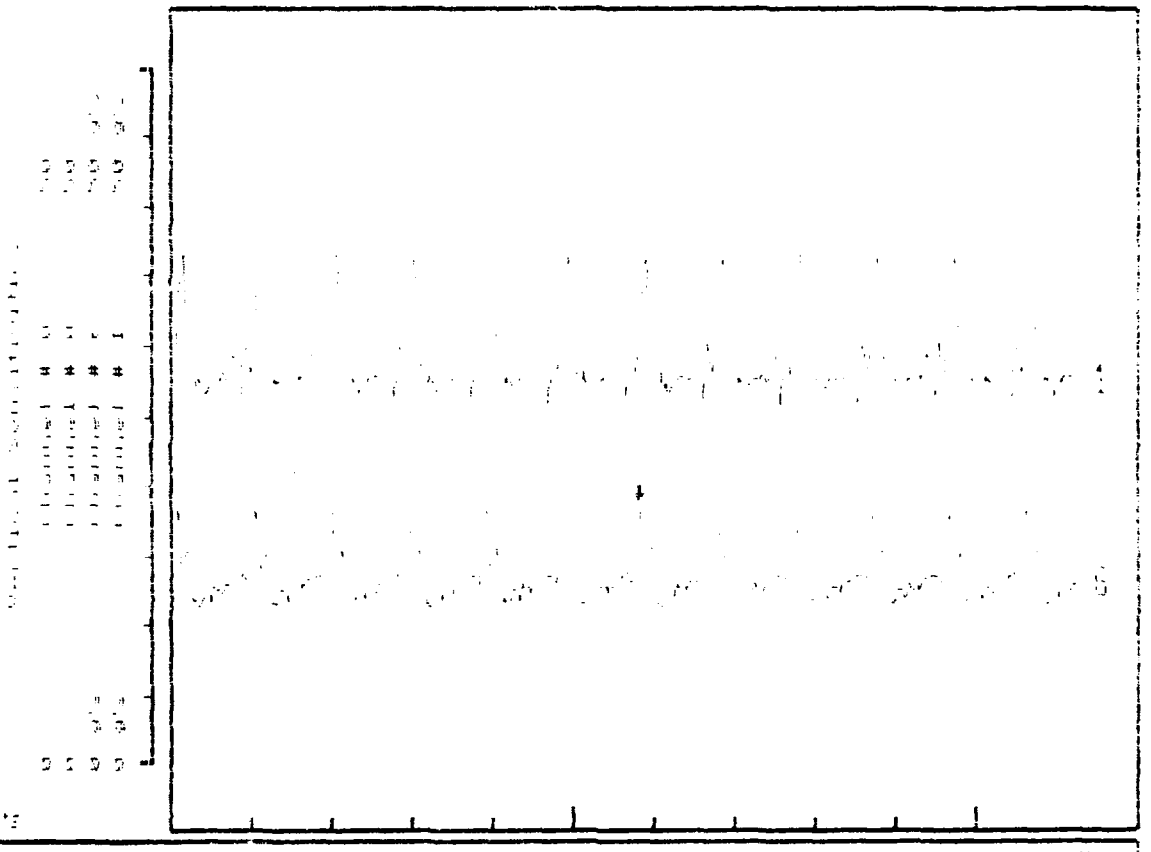
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 08-17-1990

Measurement Constants:

Transducer Ckt:
1st Integral Scale:
2nd Integral Scale:



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	1.306S	8.789 g's	9.960 g's	383.3 in/s		640mS	4
6	812.8mS	6.640 g's	6.835 g's	253.4 in/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container CNU-480 E1, MIL-STD-648, 5.7.2 Resonance strength and dwell test. Temperature -25 F. Input: Acceleration 1.0 Gp, Frequency 16.1 Hz, Response: Ch 1 - Upper Starboard, Ch 6 - Lower Port, Vertical Axis, Time 4 Minutes, Resonance Dwell.

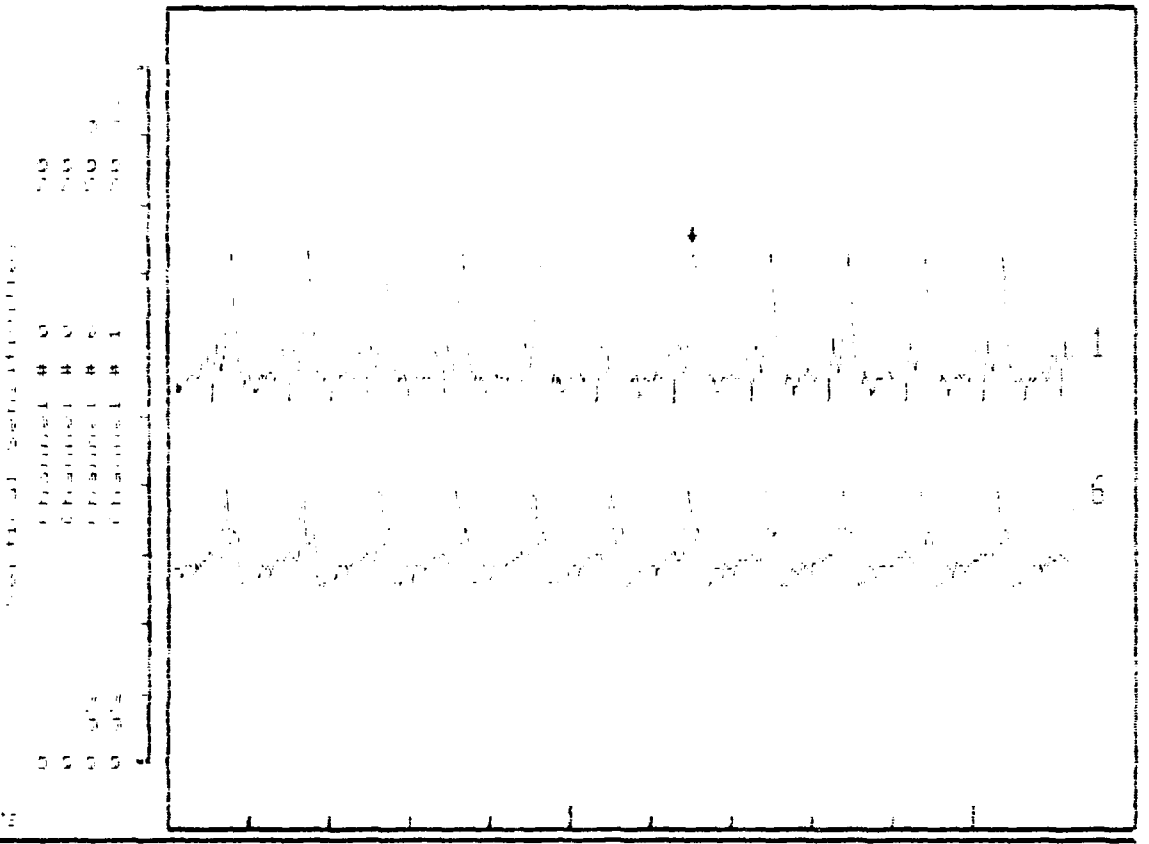
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 08-17-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 5	Ch # 6
Transducer Output	50.0 g's/Volt	50.0 g's/Volt	Volt	/Volt
1st Integral Scaler	736.4	736.4		
2nd Integral Scaler	1			



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	736mS	10.74 g's	10.93 g's	474.7 in/s		640mS	4
6	1.653S	7.031 g's	7.031 g's	333.4 in/s		640mS	4

Remarks

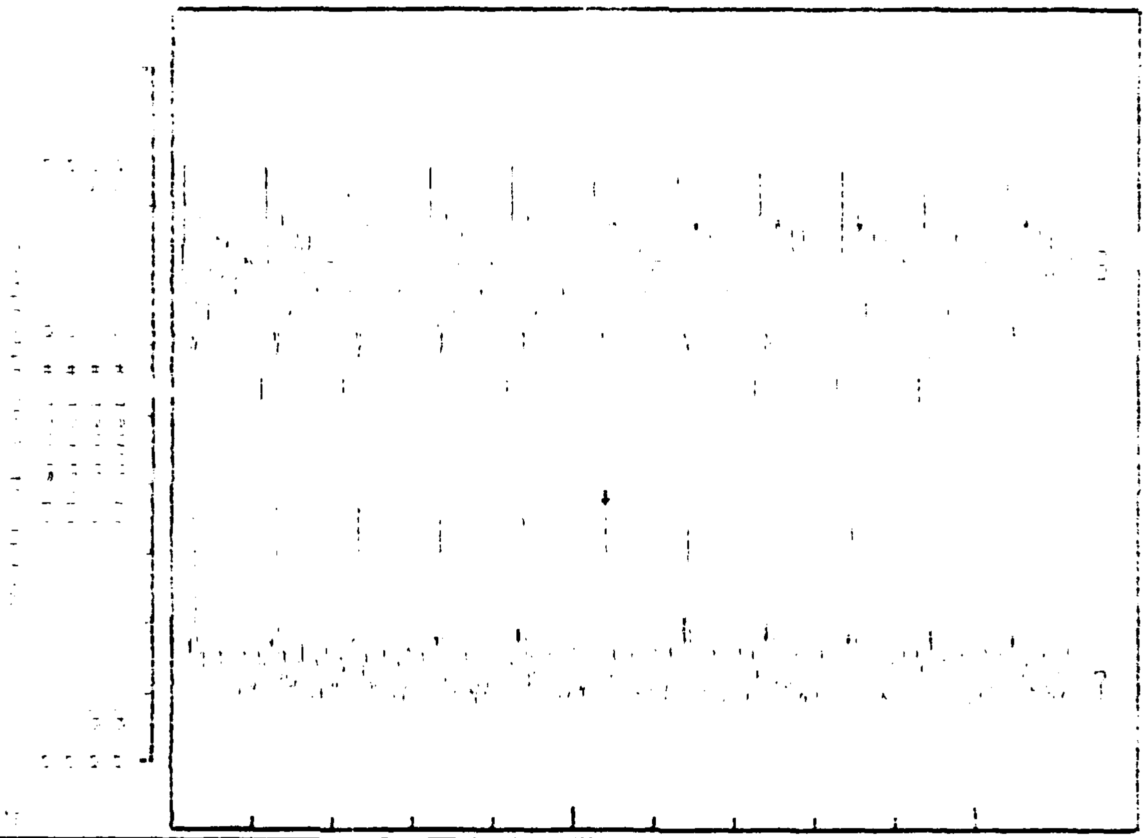
High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-460/E), MIL-STD-648, 5.3.2 Resonance strength and dwell test. Resonance Dwell, Time 3 Minutes, Temperature -25 F, Input: Acceleration .99 Gp, Frequency 10.1 Hz, Response: Ch 1 - Upper Starboard, Ch 6 - Lower Port, Vertical Axis.

Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 08-27 [illegible]

[illegible] Constants: [illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
3	281.6mS	17.18 g's	17.18 g's	915.2 In/s		640mS	4
7	744.9mS	13.47 g's	14.25 g's	379.2 In/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible],
MIL-STD-648, [illegible] Resonance Strength and Dwell test, Resonance Dwell, Time
[illegible] Minutes, Transverse [illegible], Temperature -[illegible] F, Input: Acceleration [illegible],
Frequency [illegible] Hz, Response: Ch 3 - Upper Starboard, Ch 7 - Lower Port.

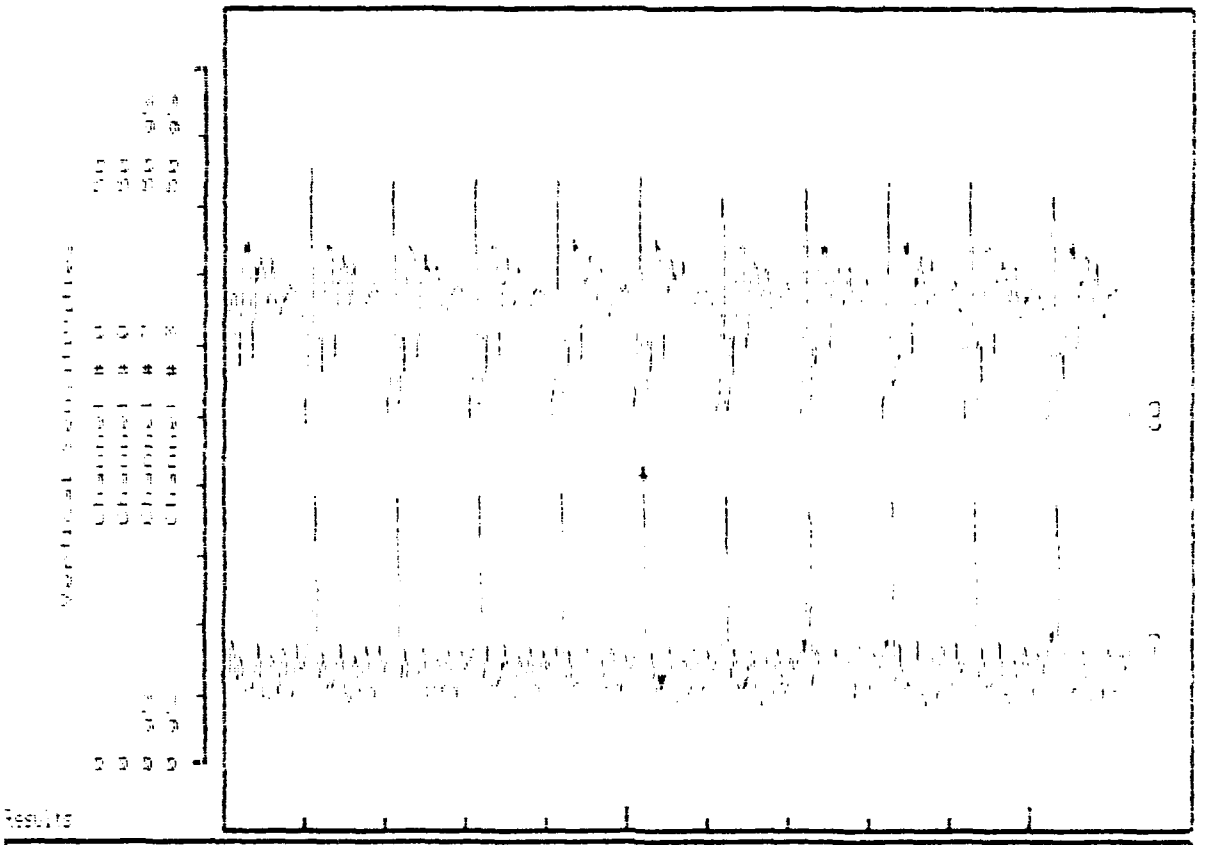
Waveform Test Report

AFFEA: HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 08-23-1990

Measurement Constants:

	Ch # 3	Ch # 7	Ch # 5	Ch # 6
Transducer Output	50.0 g's/Volt	50.0 g's/Volt	Volt	Volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



Resolve

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
3	340.4mS	17.96 g's	18.55 g's	1112. In/s		640mS	4
7	344.3mS	15.23 g's	15.23 g's	378.5 In/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), MIL-STD-648, 5.3.2 Resonance strength and dwell test. Resonance Dwell. Time 9 Minutes. Transverse Axis. Temperature -23 F. Input: Acceleration 1.0 Gs. Frequency 15.0 Hz. Response: Ch 3 - Upper Starboard. Ch 7 - Lower Port.

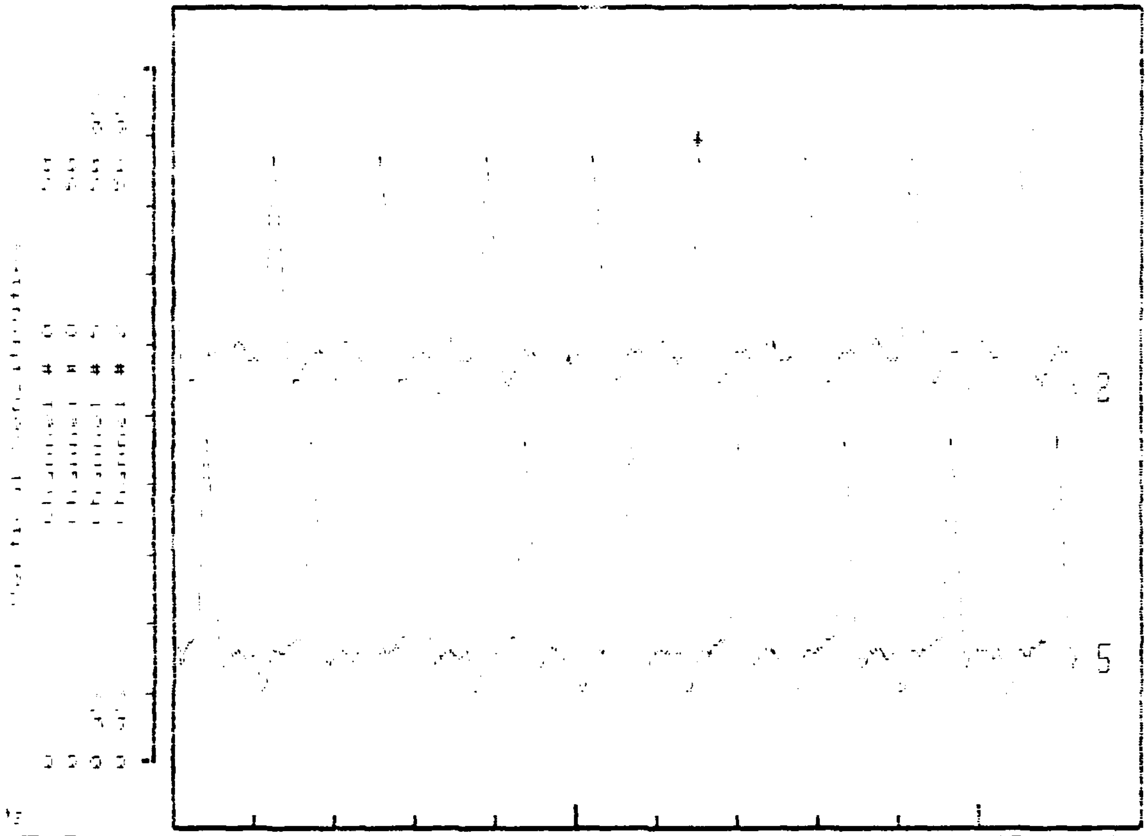
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 08-24-1990

Measurement Constants:

	Ch # 2	Ch # 5	Ch #	Ch #
Transducer Output	[illegible] g's/volt	[illegible] g's/volt	volt	volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
2	459.5mS	17.18 g's	17.38 g's	645.5 In/s		640mS	4
5	459.5mS	18.16 g's	18.75 g's	779.0 In/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-450 E)
MIL-STD-648, 5.3.2 Resonance strength and dwell test, Resonance Dwell, Time
1.5 Minutes, Longitudinal Axis, Temperature -25 F, Input: Displacement 0.125
in DA, Frequency 11.5 Hz, Response: Ch 2 - Upper Starboard, Ch 5 - Lower Port

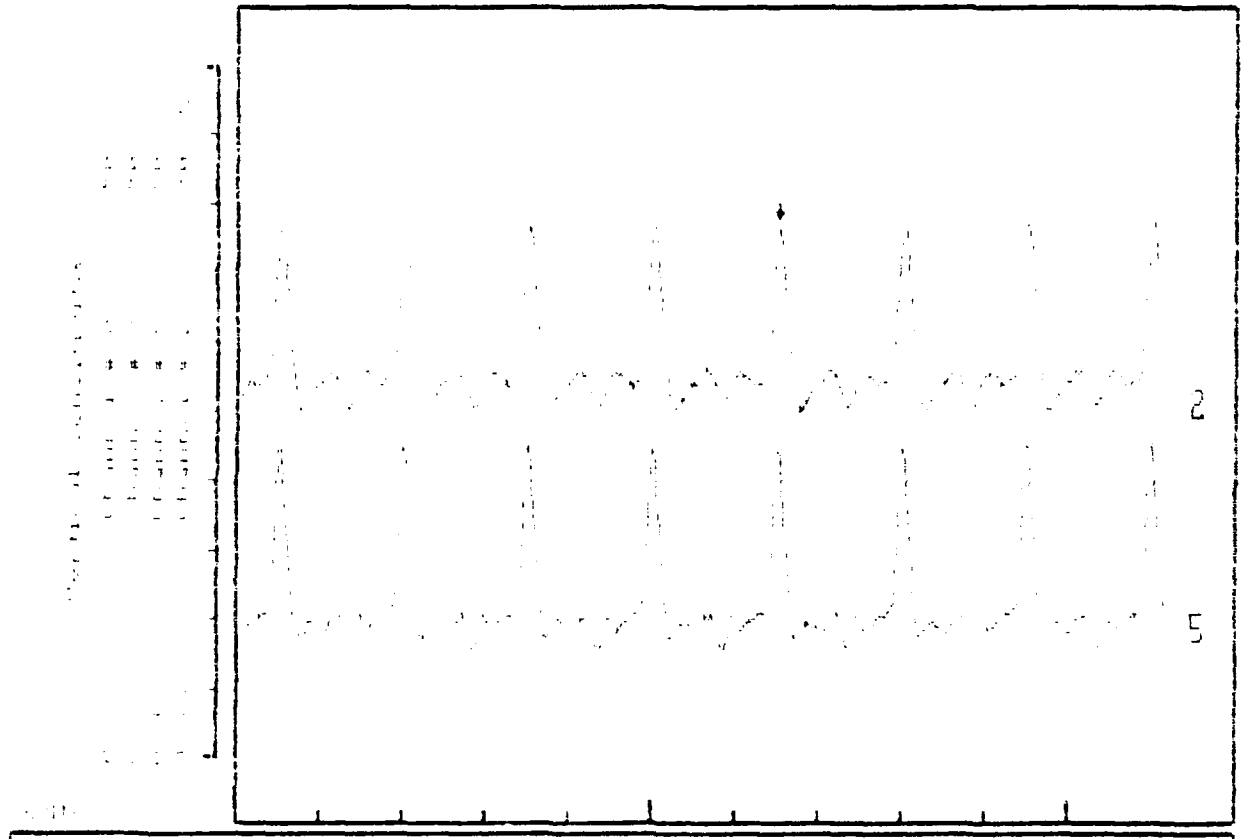
Waveform Test Report

AFFEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 08-24-1990

Measurement Constants:

	Ch # 2	Ch # 5	Ch # 3	Ch # 4
Transducer Sensitivity	50 g's/Volt	50 g's/Volt	Volt	Volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
2	428.8mS	13.28 g's	13.86 g's	514.7 In/s		640mS	4
5	427.5mS	14.25 g's	14.84 g's	482.2 In/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), MIL-STD-648, 5.3.2 Resonance strength and dwell test, Resonance Dwell, Time 5 Minutes, Longitudinal Axis, Temperature -25 F, Input: Displacment 0.125 In DA, Frequency 10.1 Hz, Response: Ch 2 - Upper Starboard, Ch 5 - Lower Port.

Test Sequence 4, MIL-STD-648A, 5.3.2, Resonance Strength and Dwell Test, Resonance Dwell, +140 Degrees Fahrenheit.

Container Axis	Time	Table Input Freq	Disp	Accel	Resonant Response Upper Stbd Accel	Trans	Lower Port Accel	Trans
Vertical	1	11.5	.125	1.7	11.1	6.5	16.0	9.4
Vertical	9	11.5	.125	1.7	11.3	6.6	14.5	8.5
Vertical	10	11.5	.125	1.7	--	--	--	--
Transverse	2	12.1	--	1.96	10.5	5.4	23.0	11.7
Transverse	10	11.6	.125	1.7	--	--	--	--
Longitudinal	1.5	12.6	--	2.0	6.8	3.4	6.3	3.2
Longitudinal	9.5	11.5	.125	1.7	7.0	4.1	6.1	3.6
Longitudinal	10	11.5	.125	1.7	--	--	--	--

Note: Prior to resonance dwell, each container axis was swept over the frequency range 5-50 Hz at a rate of 2 minutes per octave for 7.5 minutes with an input of 0.125 inches DA from 5 to 12.5 Hz and 1.0 Gp from 12.5 to 50 Hz.

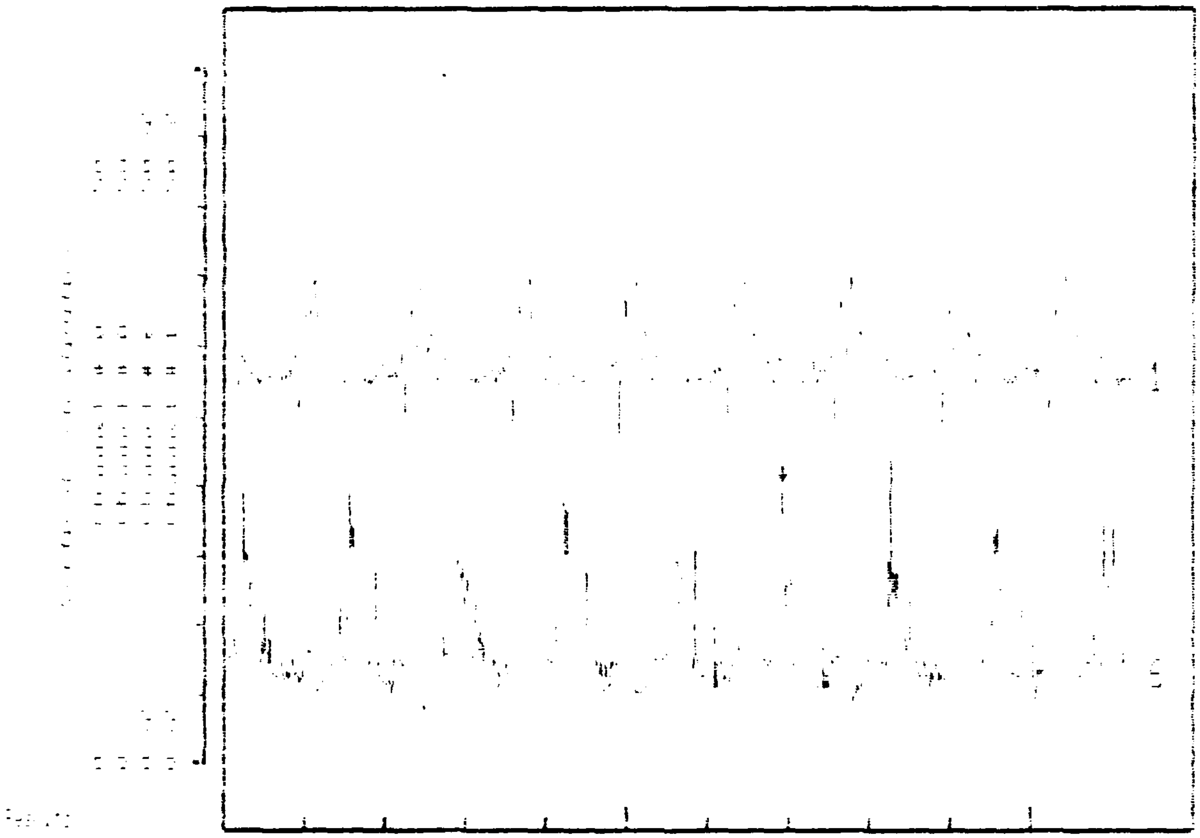
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 09-29-1990

Measurement Constants:

	Ch # 1	[illegible]	[illegible]	[illegible]
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]		
2nd Integral Scaler	[illegible]	[illegible]		



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	1.031S	11.13 g's	11.91 g's	1190. In/s		640mS	4
5	1.721S	16.01 g's	16.79 g's	758.1 In/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping And Storage Container (CNU-482/E), MIL-STD-648, 5.3.2 Resonance strenght and dwell test, Resonance Dwell, Time 1 Minute, Vertical Axis, Temperature 140 F, Input: Displacement .025 In DA, Frequency 11.5 Hz, Response: CH 1 - Upper Starboard, CH 5 - Lower Port.

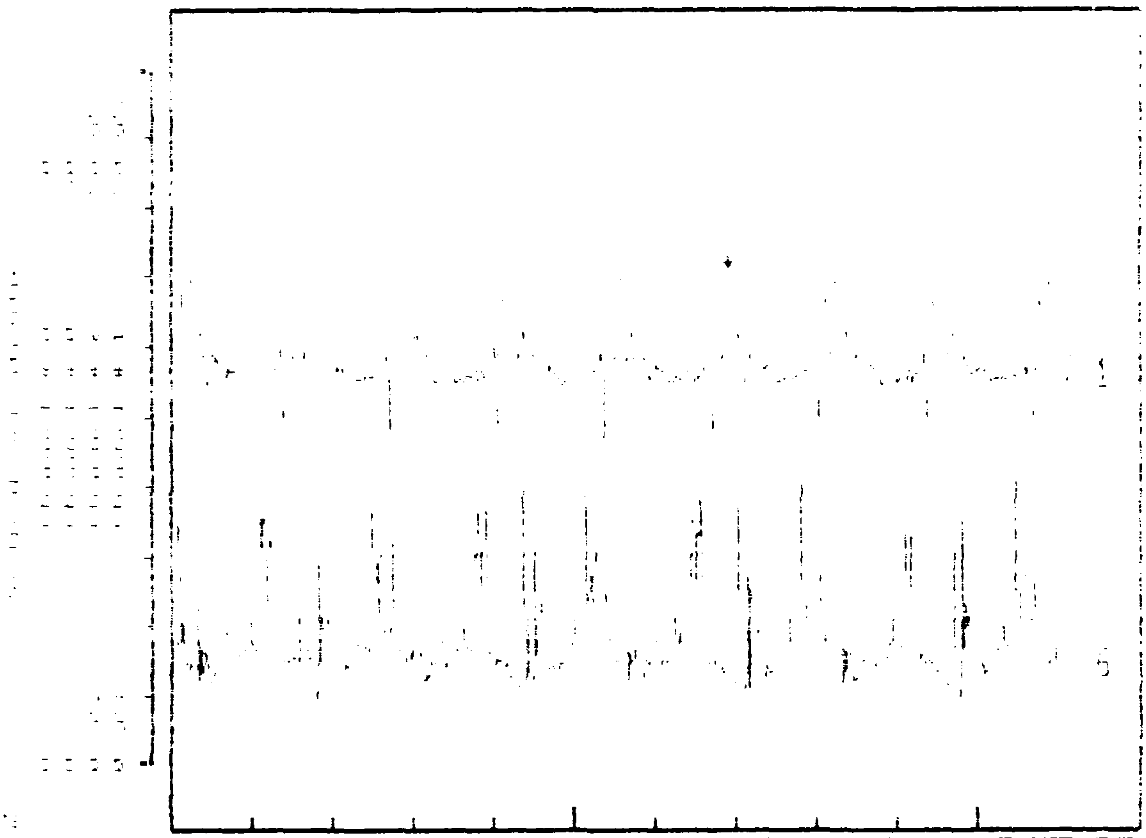
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 09-29-19[illegible]

Measurement Constants: [illegible]

Transducer Output [illegible]
1st Integral Scaler [illegible]
2nd Integral Scaler [illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	652.8mS	11.13 g's	11.52 g's	874.0 In/s		640mS	4
5	1.093S	14.45 g's	15.23 g's	729.1 In/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible]-460 E[illegible], MIL-STD-648, 5.7.2 Resonance strength and dwell test, Resonance Dwell, Time 9 Minutes, Vertical Axis, Temperature 140 F, Input: Displacement .125 In DA, Frequency [illegible] Hz, Response: Ch 1 - Upper Starboard, Ch 5 - Lower Port.

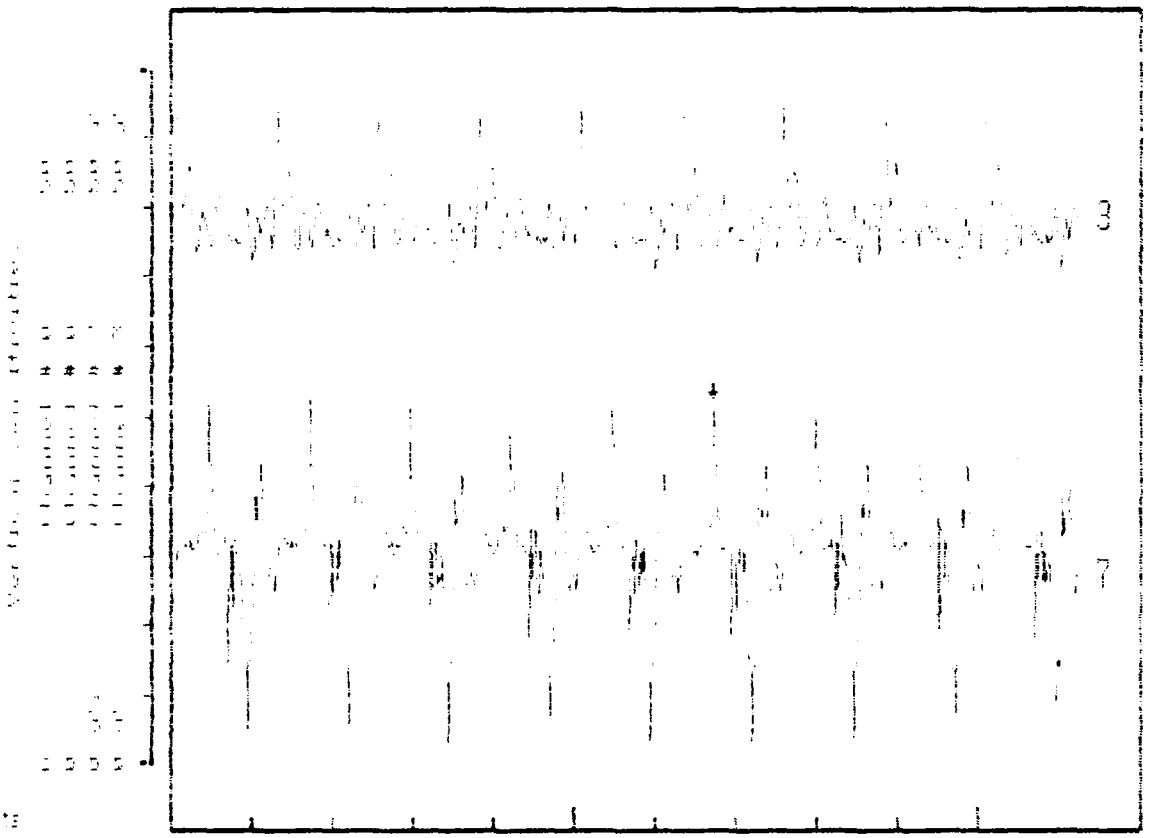
Waveform Test Report

AFPEA: HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 09-29-1990

Measurement Constants:

	Ch # 3	Ch # 7	Ch #	Ch #
Transducer Data	50.0 g Volt	50.0 g Volt	Volt	Volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
3	1.041S	10.54 g's	11.52 g's	478.1 In/s		640mS	4
7	1.102S	23.04 g's	24.60 g's	2088. In/s		640mS	4

Remarks

High Explosive Anti-Armor Rocket Shipping & Storage Container (CNU-436/E), MIL-STD-648, 5.3.2 Resonance strength and dwell test. Resonance Dwell, Time 2 Minutes, Transverse Axis, Temperature 140 F. Input: Acceleration .98 Gp. Frequency 12.1 Hz. Response: Ch 3 - Upper Starboard, Ch 7 - Lower Port.

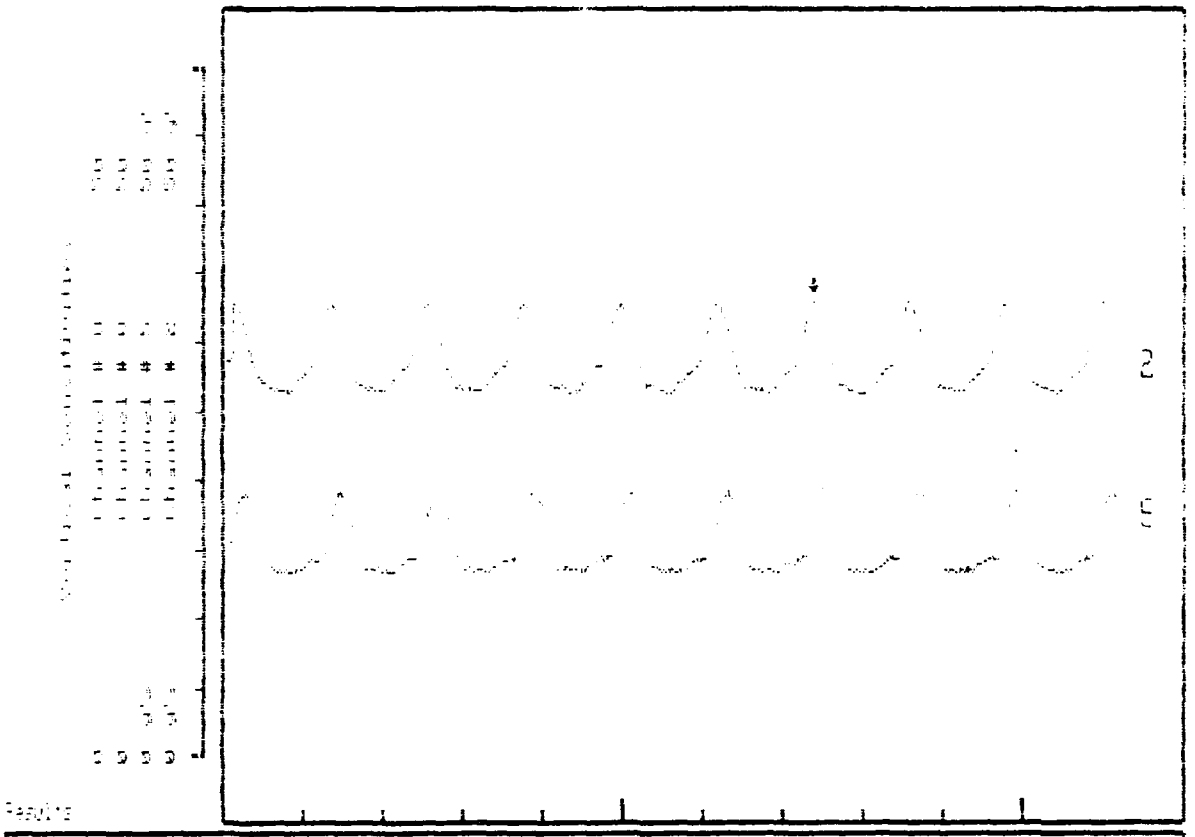
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 09-29-1990

Measurement Constants:

Transducer Output	50.0 g's/Volt	50.0 g's/Volt	Volts	Volts
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
2	483.8mS	6.835 g's	7.031 g's	440.1 In/s		640mS	4
5	492.8mS	6.25 g's	6.25 g's	370.9 In/s		640mS	4

Remarks

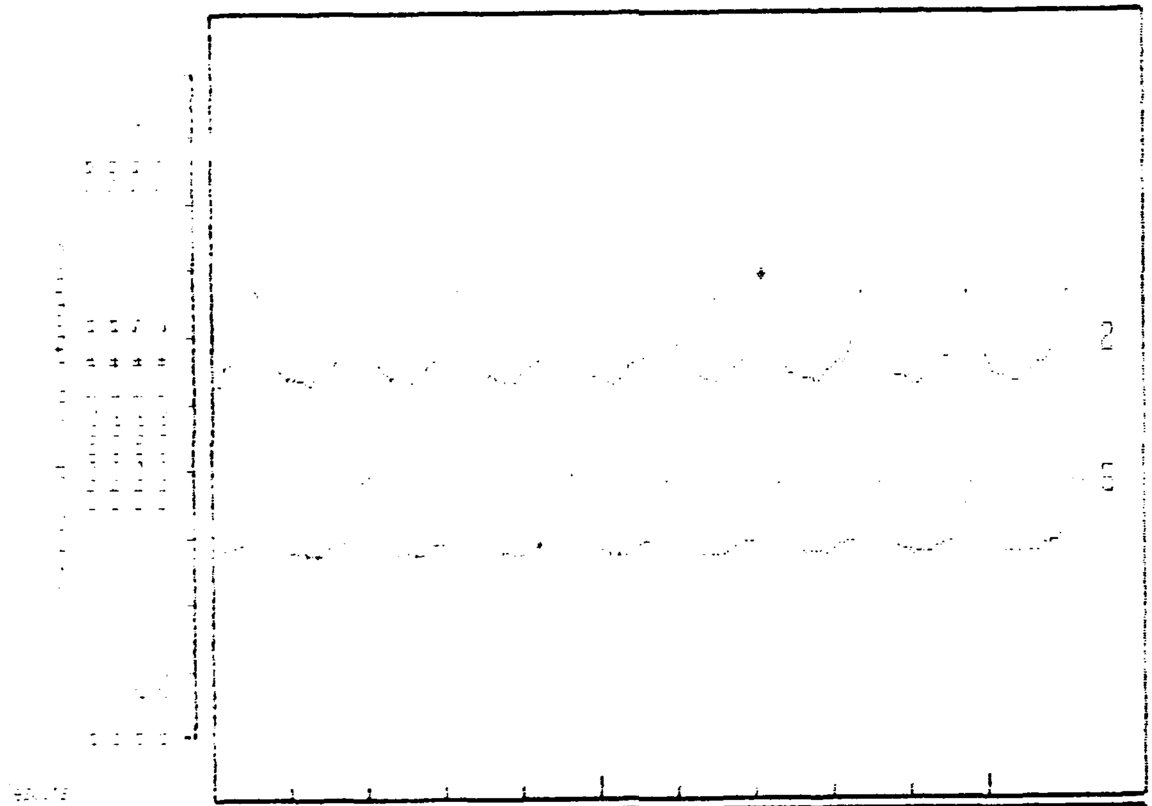
High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), MIL-STD-648, 5.3.2 Resonance strength and dwell test, Resonance Dwell, Time 1.5 Minutes, Longitudinal Axis, Temperature 140 F, Input: Acceleration 1.0 Gp Frequency 12.6 Hz, Response: Ch 2 - Upper Starboard, Ch 5 - Lower Port.

Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 09-29-1990

Measurement Constants:



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
2	465.9mS	7.031 g's	7.226 g's	484.7 In/s		640mS	4
5	392.9mS	6.054 g's	6.25 g's	286.3 In/s		640mS	4

Remarks

[illegible] Explosive Anti-Armor Rocket Shipping and Storage Container [illegible], MIL-STD-[illegible], [illegible] Resonance Strength and Dwell test, Resonance Dwell, Time [illegible] Minutes, Longitudinal Axis, Temperature 140 F, Input: Displacement .125 In DA, Frequency [illegible] Hz, Response: Ch 2 - Upper Starboard, Ch 5 - Lower Port.

Test Sequence 6, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

Test Time Minutes	Test Pressure In Water (psig)	Leak Rate Psi per hour
0	42.2 (1.53)	--
60	42.1 (1.52)	0.004

Test Sequence 7, Fed-Std-101C, Method 5019.1, Shock(Repetitive) Test, Ambient Temperature.

Container Orientation Face	Table Input Frequency Hz	Displacement In DA	Time Min	Vertical Response Upper Stbd Gpp	Lower Port Gpp
Bottom	4.5	1.0	5	6.8	12.3
Bottom	4.5	1.0	48	5.5	13.9
Bottom	4.5	1.0	60	--	--
Port	4.5	1.0	14	8.8	--
Port	4.5	1.0	52	9.0	--
Port	4.5	1.0	60	--	--
Aft End	4.8	1.0	7	6.6	4.9
Aft End	4.8	1.0	49	5.7	3.7
Aft End	4.8	1.0	60	--	--

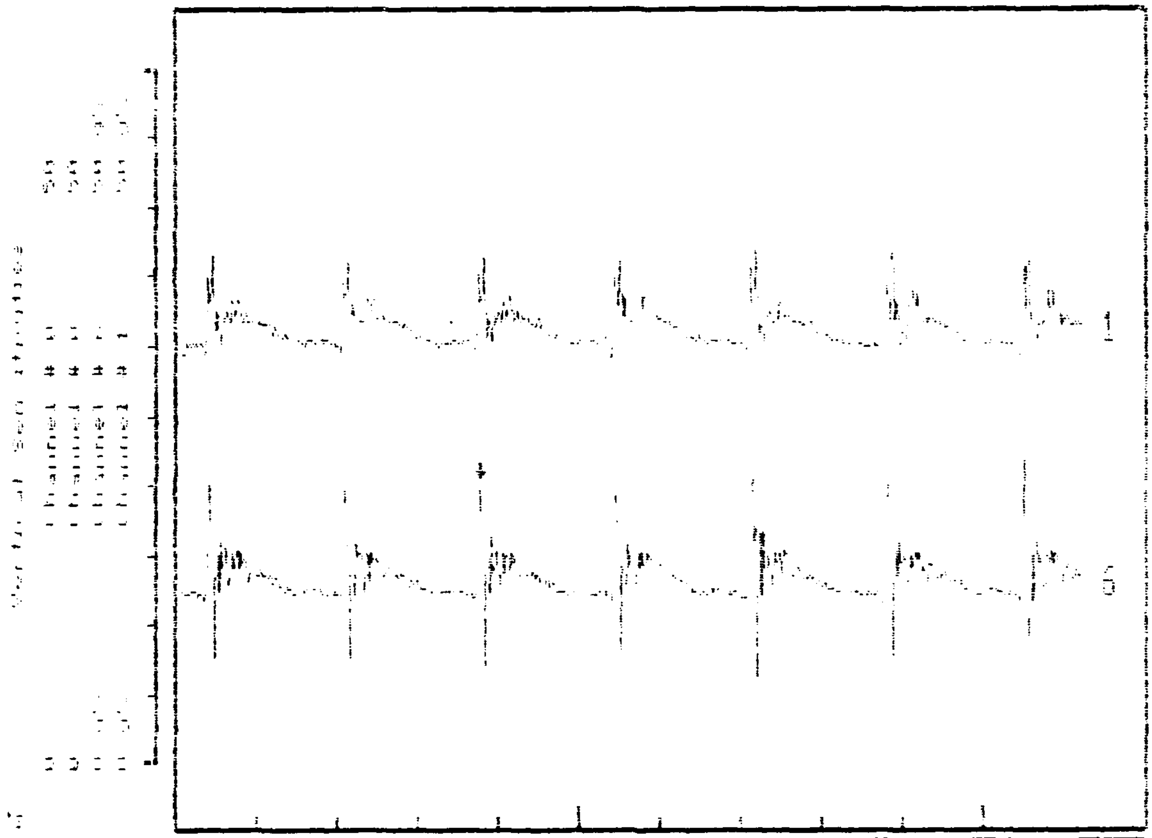
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 08-30-1990

Measurement Constants:

	Ch # 1	Ch # 6	Ch # [illegible]	Ch # [illegible]
Transducer Output	[illegible] g/volt	[illegible] g/volt	volt	volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	706.5mS	6.835 g's	7.912 g's	498.0 In/s		1.28S	2
6	486.4mS	12.30 g's	14.64 g's	1064. In/s		1.28S	2

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5019.1, Shock Test (Repetitive), Time 5 Minutes, Vertical Axis, Bottom Face, Input: Displacement 1.0 In DA, Frequency 4.5 Hz, Response: Ch 1 - Upper Starboard, Ch 6 - Lower Port.

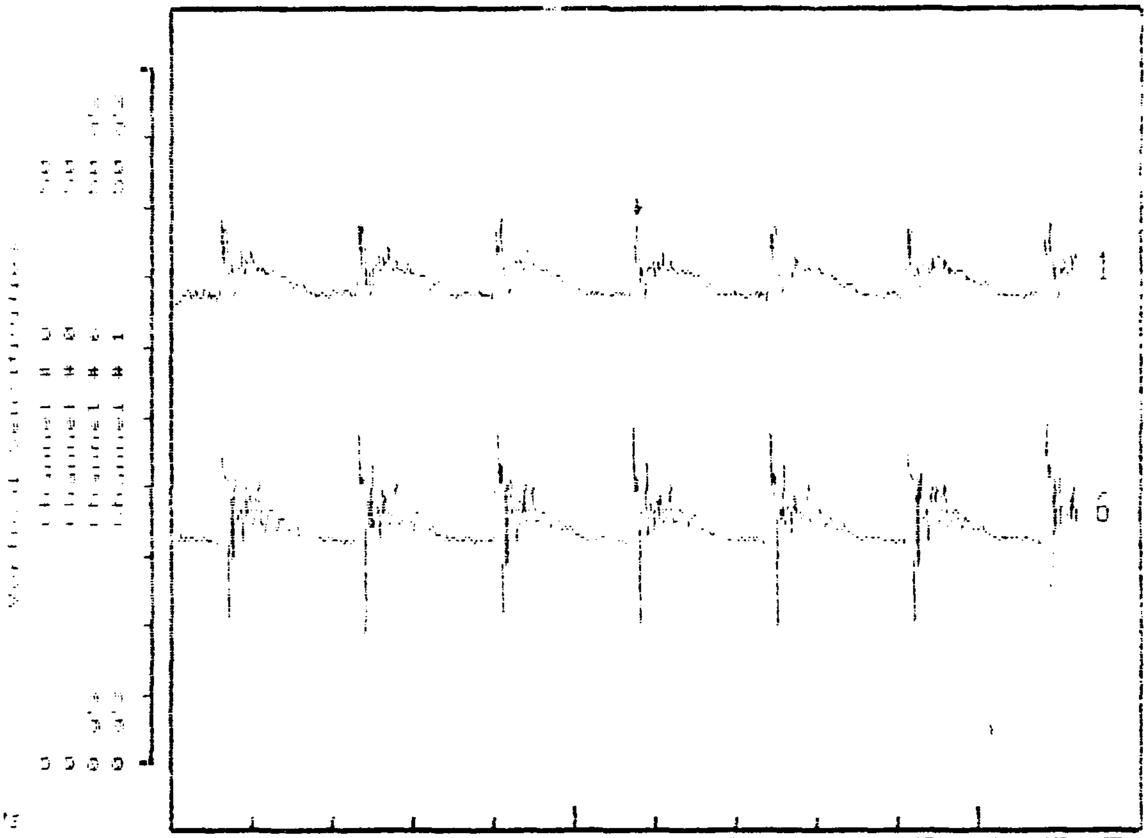
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 08-30-1990

Measurement Constants:

	Ch # 1	Ch # 6	Ch #	Ch #
Transducer Output	50.0 g's/Volt	50.0 g's/Volt	/Volt	/Volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	739.8mS	5.468 g's	6.054 g's	418.7 In/s		1.285	2
6	734.7mS	13.86 g's	15.03 g's	1872. In/s		1.285	2

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E),
Fed-Std-101, Method 5019.1, Shock Test (Repetitive), Time 48 Minutes.
Vertical Axis, Bottom Face, Input: Displacement 1.0 In DA, Frequency 4.5 Hz.
Response: Ch 1 - Upper Starboard, Ch 6 - Lower Port.

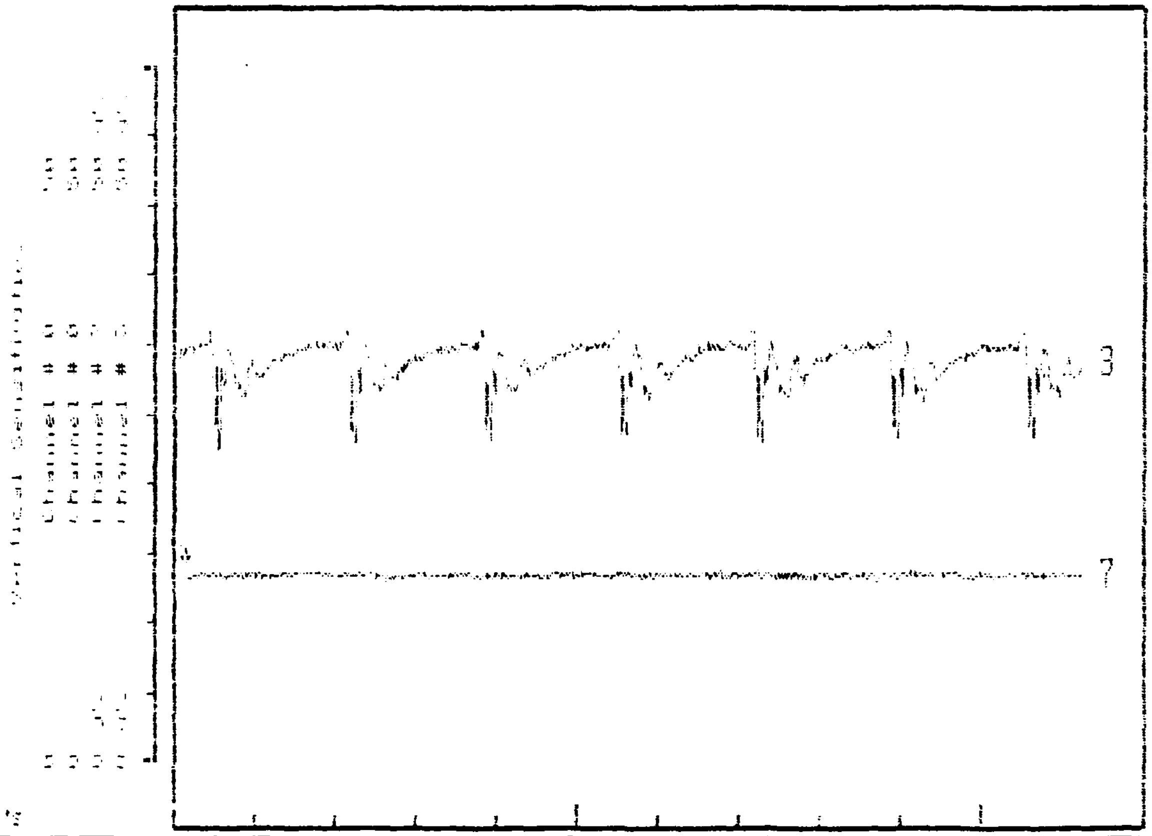
Waveform Test Report

AFPEA: HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 08-30-1990

Measurement Constants:

	Ch # 3	Ch # 7	Ch #)	Ch # :
Transducer Output	50.g's/Volt	50.g's/Volt	Volt	Volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
3	706.5mS	8.789 g's	9.375 g's	1725. In/s		1.28S	2
7	20.48mS	-1.367 g's	-1.367 g's	0 In/s		1.28S	2

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-460/E),
Fed-Std-101, Method 5019.1, Shock Test (Repetitive), Time 14 Minutes.
Transverse Axis, Port Face, Input: Displacement 1.0 I DA, Frequency 4.5 Hz.
Response: Ch 3 - Upper Starboard, Ch 7 - Lower Port.

Waveform Test Report

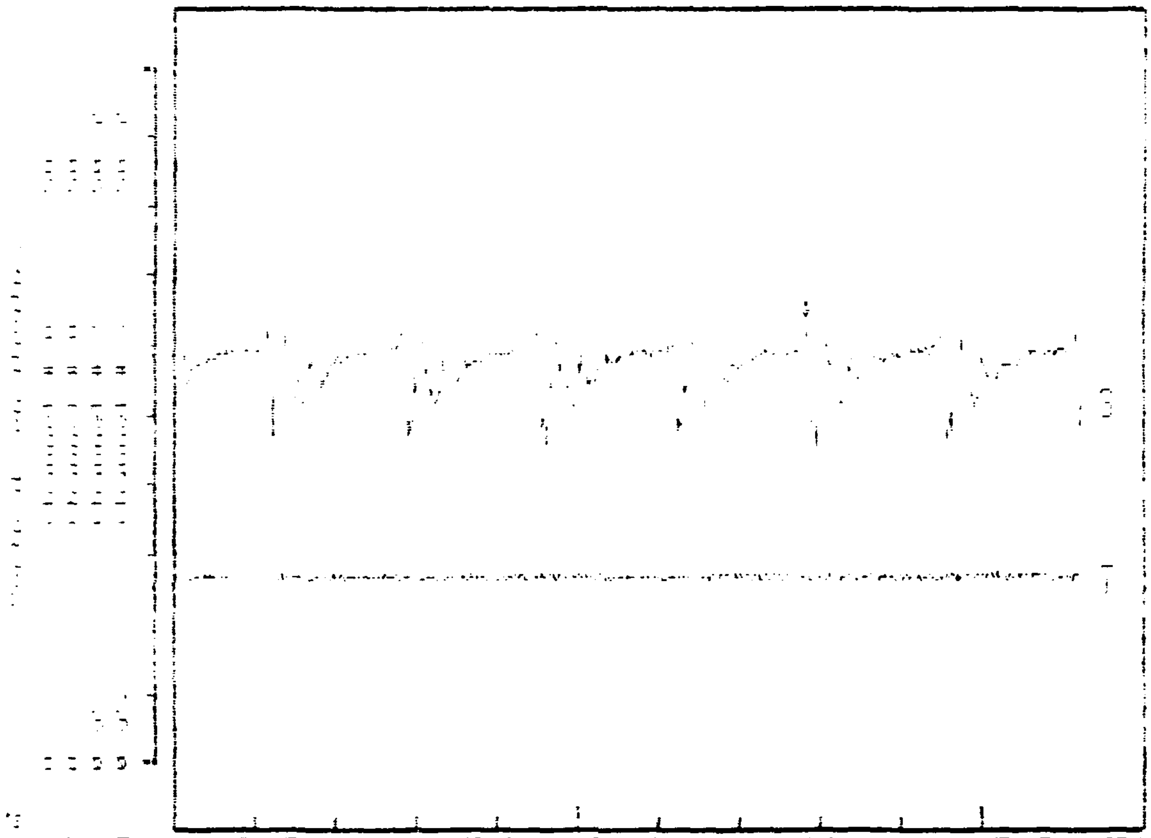
Test Ident: AF FACPRAINBOEGAECARBTZ, TRIAD Date of Test: 08-[illegible]

Measurement Constants:

Transducer Output

1st Integral Scaler

2nd Integral Scaler



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
3	1.803S	8.984 g's	8.984 g's	2373. In/s		1.28S	2
7	20.48mS	.1953 g's	.3906 g's	.7728 In/s		1.28S	2

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5019.1, Shock Test (Repetitive), Time **52** Minutes, Transverse Axis, Port Face, Input: Displacement 1.0 In DA, Frequency 4.5 Hz, Responses: Ch 3 - Upper Starboard, Ch 7 - Lower Port.

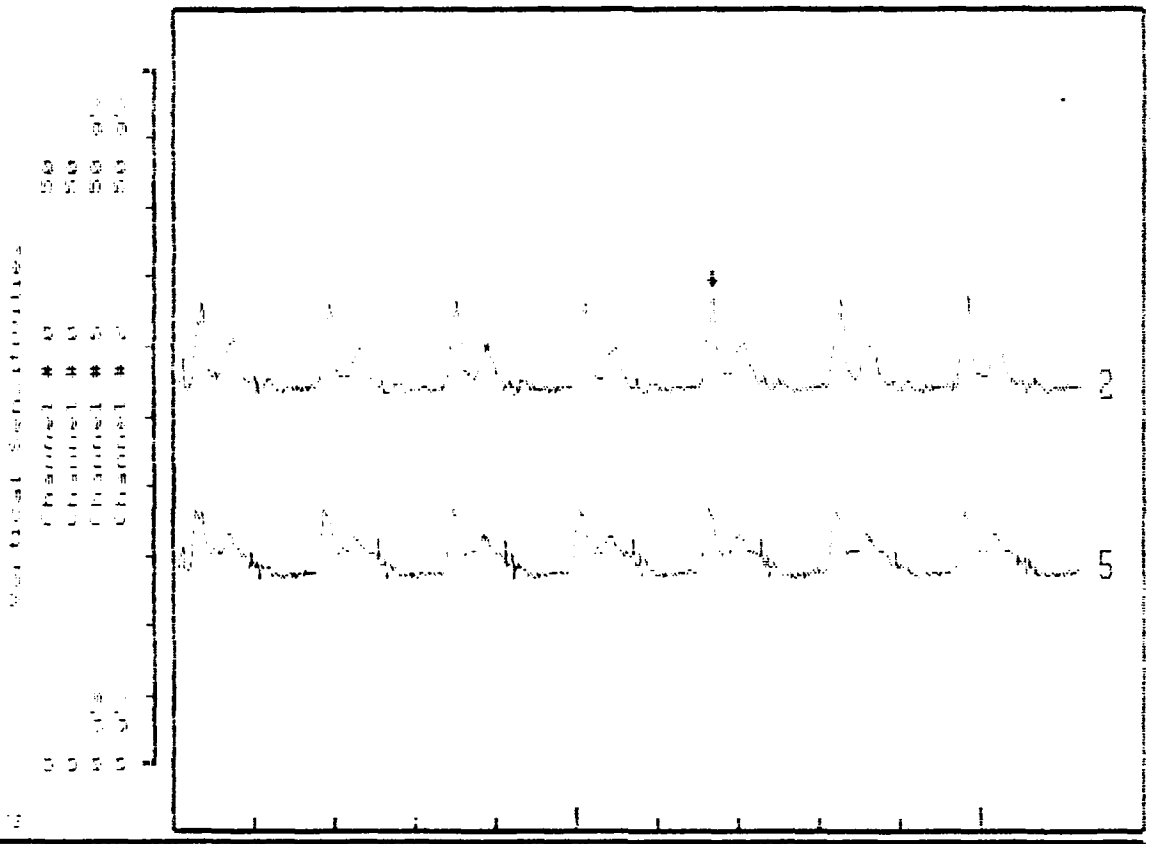
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 08-30-1990

Measurement Constants:

	Ch # 2	Ch # 5	Ch # 0	Ch # 1
Transducer Output	50.g's/Volt	51.g's/Volt	/Volt	/Volt
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	1	1		



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
2	857.6mS	6.640 g's	7.226 g's	386.7 In/s		1.285	2
5	849.9mS	4.882 g's	5.078 g's	418.4 In/s		1.285	2

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Stu-101, Method 5019.1, Shock Test (Repetitive), Time 7 Minutes, Longitudinal Axis, Aft Face, Input: Displacement 1.0 In DA, Frequency 4.8 Hz, Response: Ch 2 - Upper Starboard, Ch 5 - Lower Port.

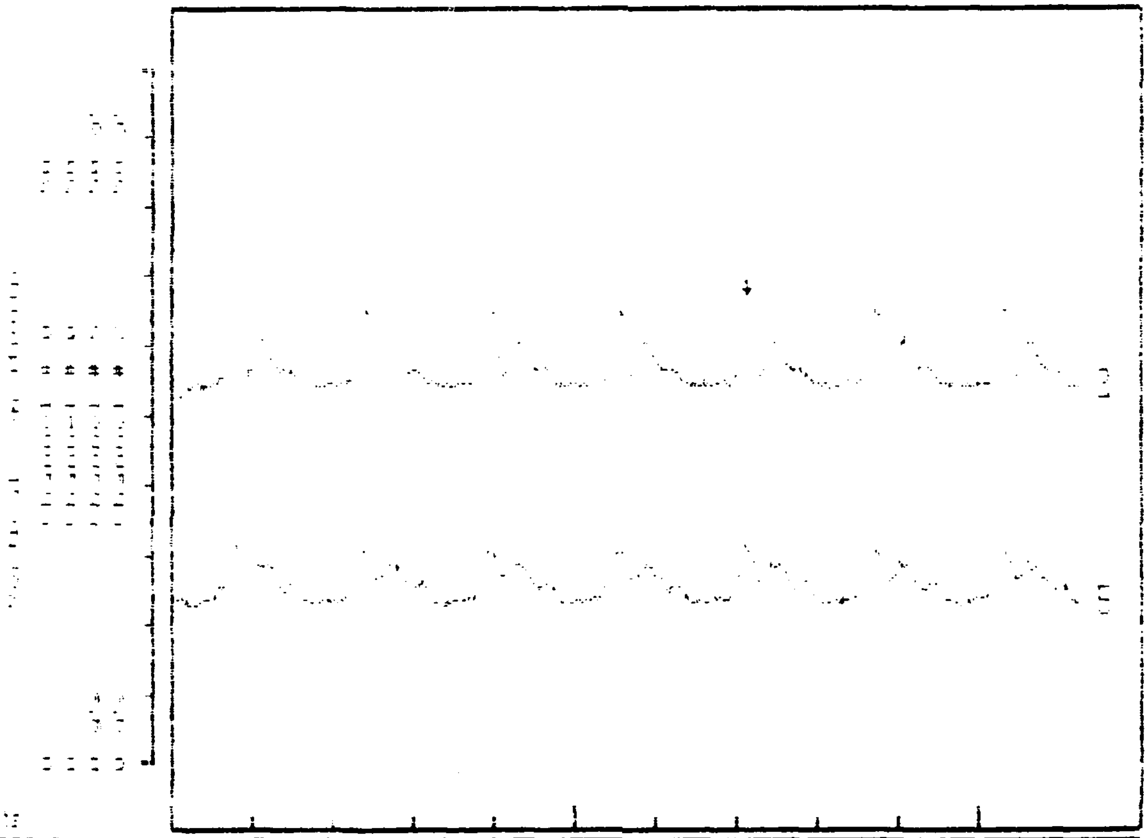
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 08-30-1990

Measurement Constants:

	Ch # 2	Ch # 5	Ch	Ch
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	386.4	386.4		
2nd Integral Scaler	[illegible]	[illegible]		



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
2	913.9mS	5.664 g's	6.054 g's	360.5 In/s		1.285	2
5	908.8mS	3.710 g's	4.296 g's	442.4 In/s		1.285	2

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-430/E), Fed-Std-101, Method 5019.1, Shock Test (Repetitive), Time 49 Minutes, Longitudinal Axis, Aft Face, Input: Displacement 1.0 In DA, Frequency 4.8 Hz, Response: Ch 2 - Upper Starboard, Ch 5 - Lower Port.

Test Sequences 8 and 9, Fed-Std-101C, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, +140 Degrees Fahrenheit, 18 Inches Drop Height.

Container Orientation Accelerometer	Peak Acceleration Response Vertical Gp	Transverse Gp	Longitudinal Gp	Resultant Gp
Bottom(3)				
Upper Starboard	36.3	32.0	13.7	50.4
Lower Port	32.8	8.2	0.8	34.0
Port Side(2)				
Upper Starboard	11.7	54.7	4.7	55.5
Lower Port	9.4	55.5	1.6	56.3
Corner 2-3-6				
Upper Starboard	12.5	22.6	23.4	33.6
Lower Port	7.0	25.8	20.3	33.6
Corner 1-4-5				
Upper Starboard	4.7	28.1	27.3	39.1
Lower Port	--	--	31.2	--

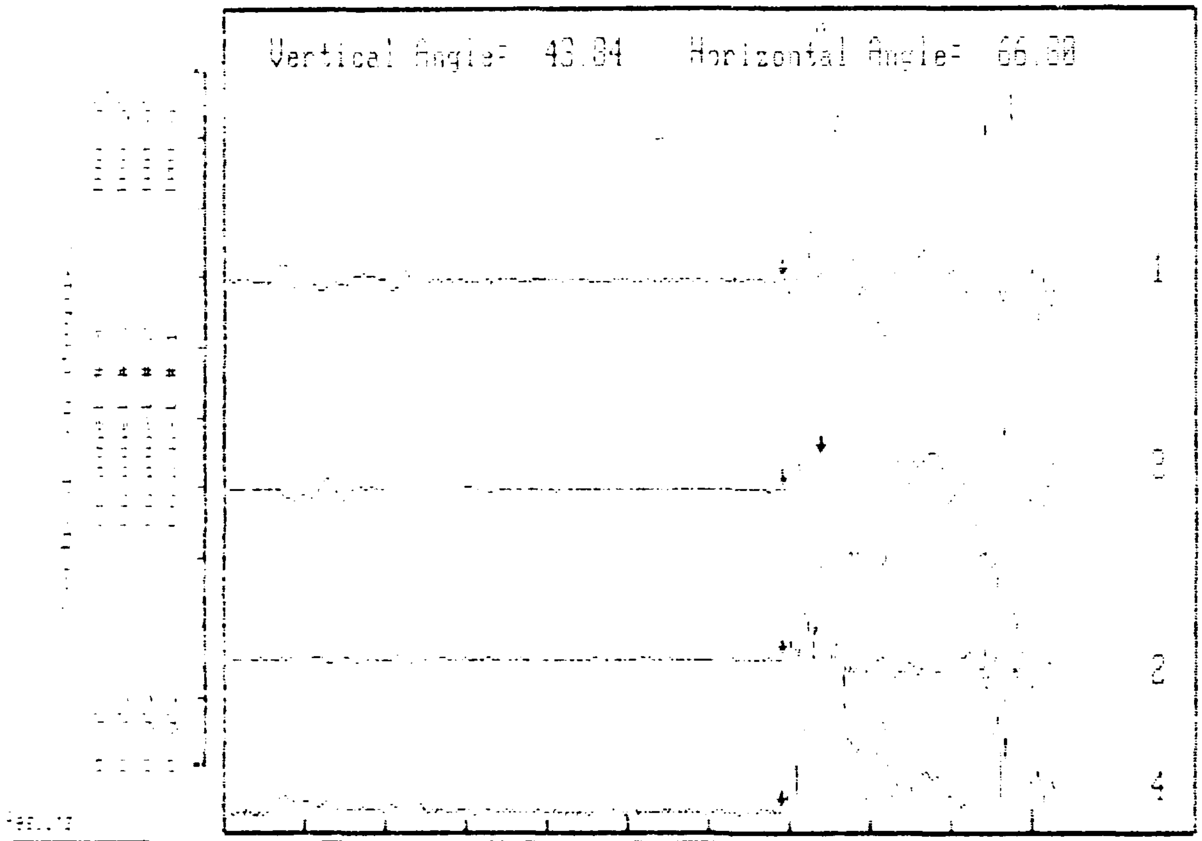
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 05-09-1990

Measurement Constants: [illegible]

Transducer Output [illegible]
1st Integral Scaler [illegible]
2nd Integral Scaler [illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	12.28mS	36.32 g's	37.5 g's	63.37 In/s		256mS	1
2	12.28mS	13.67 g's	14.86 g's	25.65 In/s		256mS	1
3	12.28mS	32.03 g's	37.5 g's	61.36 In/s		256mS	1
4	12.28mS	50.39 g's	51.17 g's	142.5 In/s		256mS	1

Remarks

[illegible] Storage Container [illegible], [illegible] Procedure 3, Drop Height 18 In, Temperature [illegible] F, [illegible] Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, [illegible] Filtered [illegible]

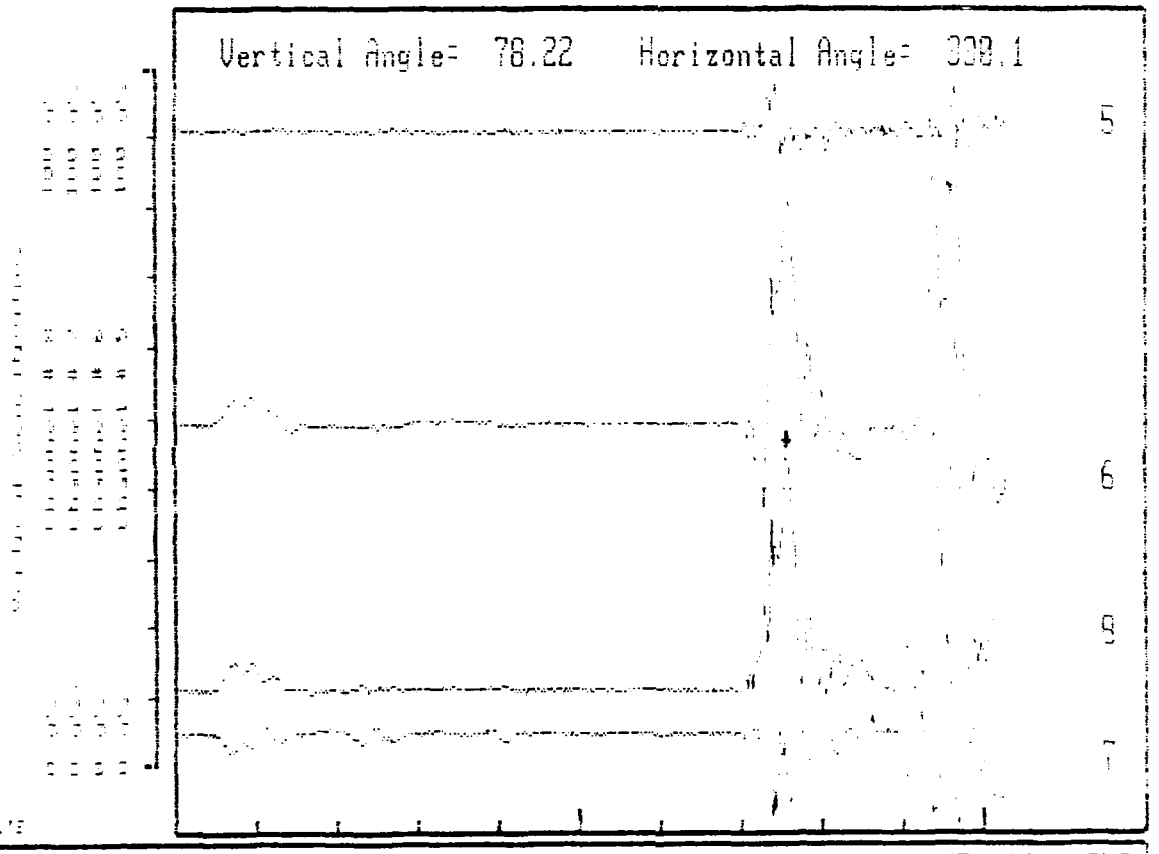
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 05-09-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50.g's/Volt	50.g's/Volt	50.g's/Volt	50.g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	192mS	-.7812 g's	9.765 g's	1.391 In/s		256mS	1
6	192mS	32.81 g's	32.81 g's	76.04 In/s		256mS	1
7	192mS	-8.203 g's	-12.10 g's	-35.39 In/s		256mS	1
8	192mS	33.98 g's	33.98 g's	132.1 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E). Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Temperature 140 F, Bottom Face, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 200 Hz -3 db.

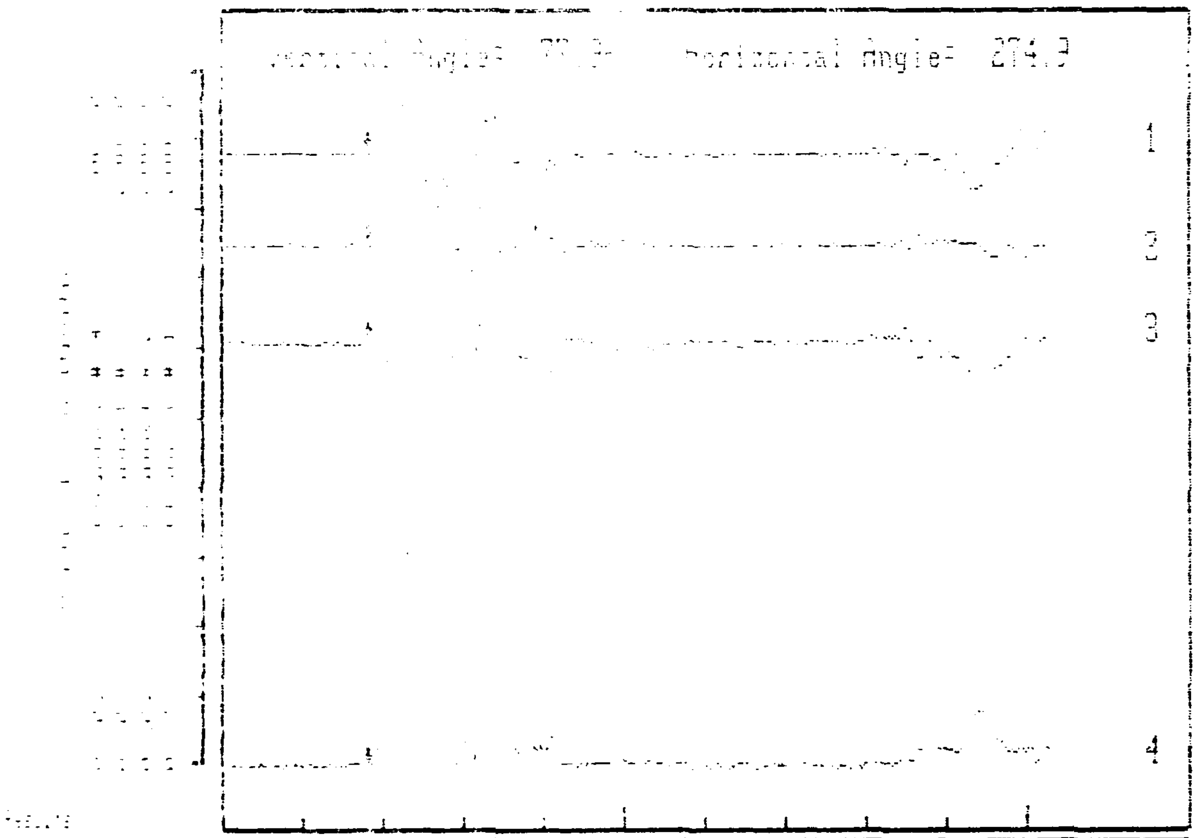
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 05-09-1990

[illegible] Constants: [illegible]

[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	12.28mS	11.71 g's	14.34 g's	29.67 In/s		256mS	1
2	12.28mS	4.687 g's	6.25 g's	12.98 In/s		256mS	1
3	12.28mS	-54.68 g's	-54.68 g's	-75.73 In/s		256mS	1
4	12.28mS	55.46 g's	56.25 g's	80.99 In/s		256mS	1

Remarks

High Explosive Anti-Armor [illegible] Storage Container [illegible],
Fed-Std-[illegible] Method [illegible] Fall Drop Test, Procedure [illegible], Drop Height 18 In.
Temperature [illegible], Upper [illegible] Accelerometer: Ch 1 - Vert,
Ch 2 - [illegible] 4 - Resultant, Filtered LP [illegible] Hz -7 db.

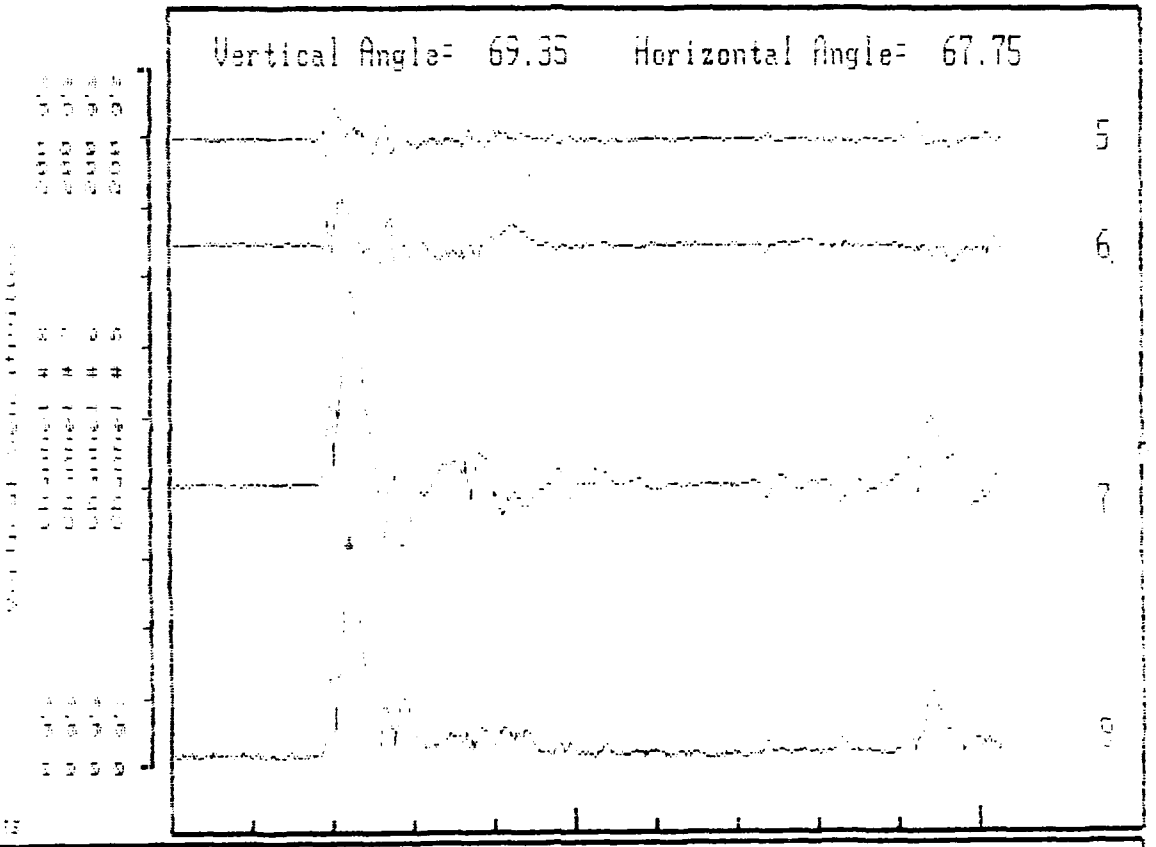
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 05-09-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50 g's/Volt	50 g's/Volt	50 g's/Volt	50 g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	55.29mS	1.562 g's	10.93 g's	3.400 In/s		256mS	1
6	55.29mS	9.375 g's	14.84 g's	29.36 In/s		256mS	1
7	55.29mS	55.46 g's	56.25 g's	89.95 In/s		256mS	1
9	55.29mS	54.68 g's	55.46 g's	76.04 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container CNU-480/E[illegible], Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Temperature 140 F, Port Side D, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 290 Hz -3 db.

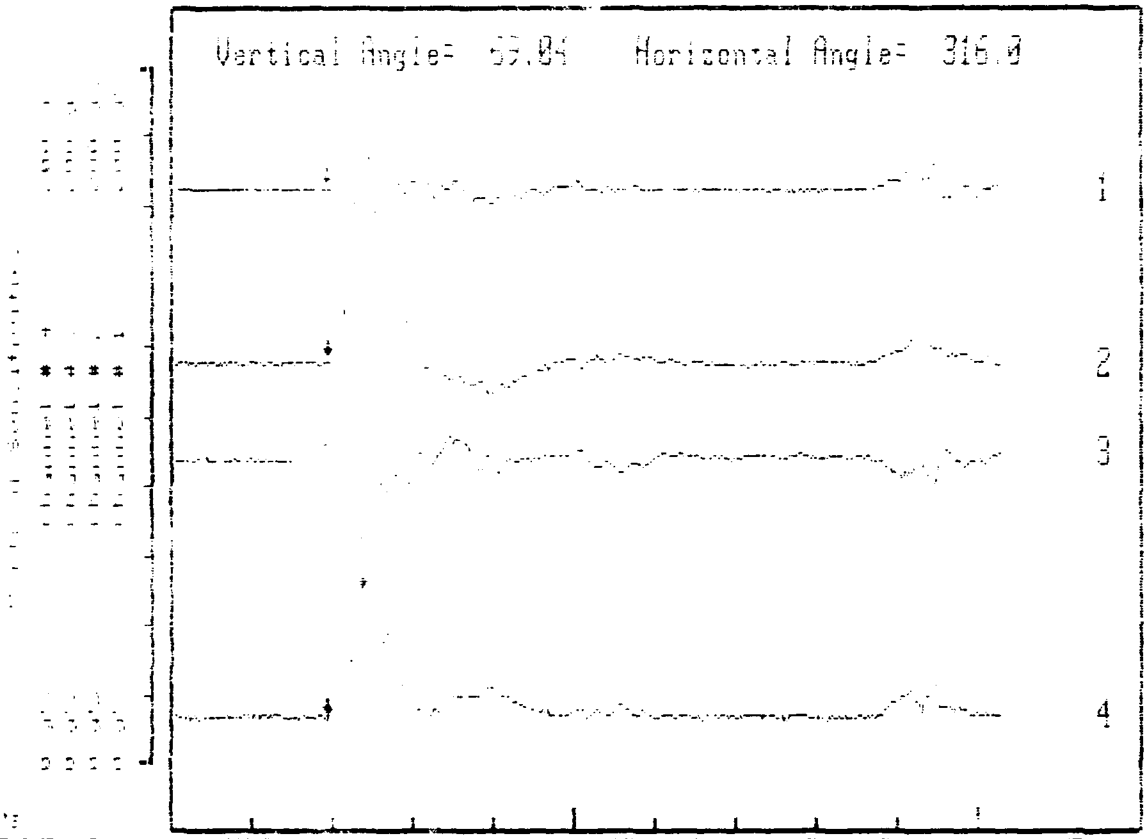
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 05-09-1990

Measurement Constants: [illegible]

	Ch 1	Ch 2	Ch 3	Ch 4
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integral Scaler	[illegible]		[illegible]	[illegible]



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	11.26mS	12.5 g's	13.28 g's	21.82 In/s		256mS	1
2	11.26mS	23.43 g's	25 g's	52.86 In/s		256mS	1
3	11.26mS	-22.65 g's	-23.43 g's	-50.07 In/s		256mS	1
4	11.26mS	33.59 g's	33.59 g's	62.75 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method [illegible], Free Fall Drop Test, Procedure B, Drop Height 18 In. Temperature 14? F, Corner [illegible], Upper Starboard Accelerometer: Ch 1 - Vert. Ch 2 - Long. Ch 3 - Trans. Ch 4 - Resultant. Filtered LP 290 Hz -3 db.

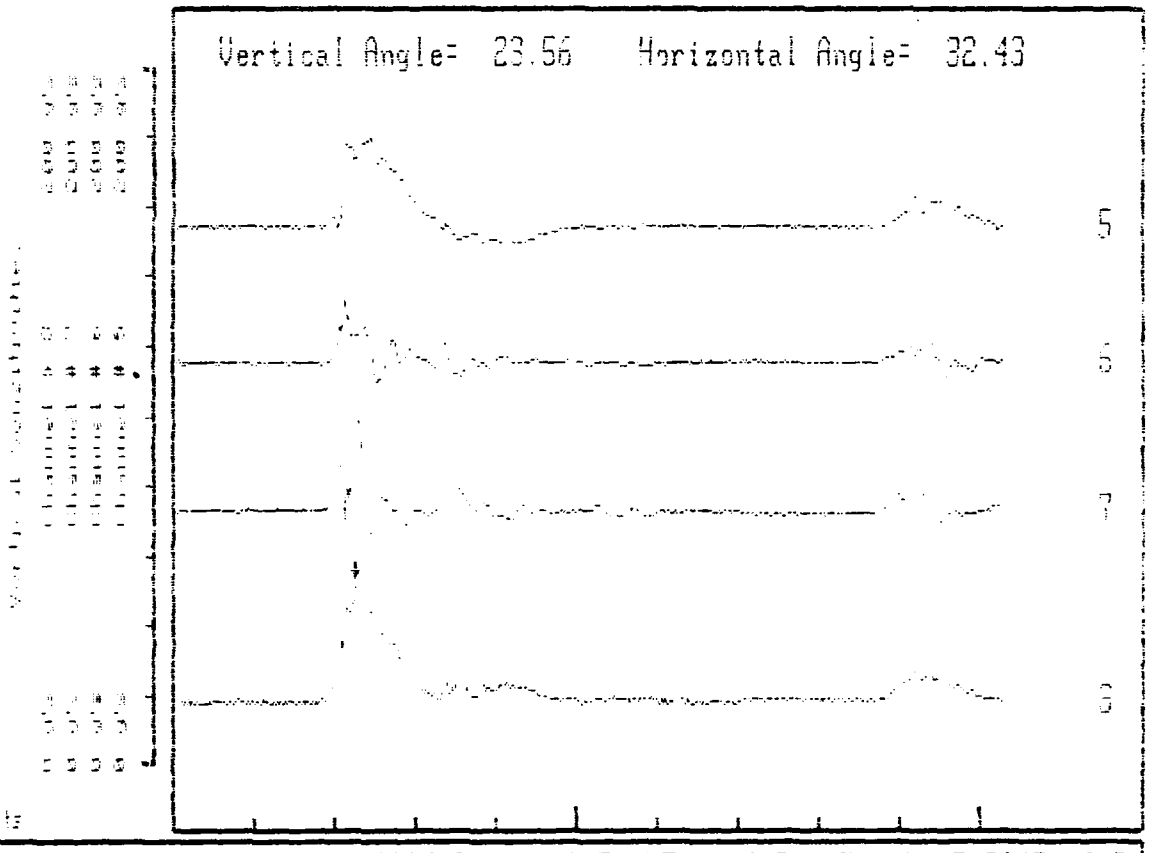
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 05-09-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50.0 g's/volt	50.0 g's/volt	50.0 g's/volt	50.0 g's/volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	56.32mS	20.31 g's	24.21 g's	36.16 In/s		256mS	1
6	56.32mS	7.031 g's	17.96 g's	25.34 In/s		256mS	1
7	56.32mS	25.78 g's	25.78 g's	33.38 In/s		256mS	1
8	56.32mS	33.59 g's	33.59 g's	75.73 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480 E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Temperature 140 F, Corner 2-3-6, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 200 Hz -3 db.

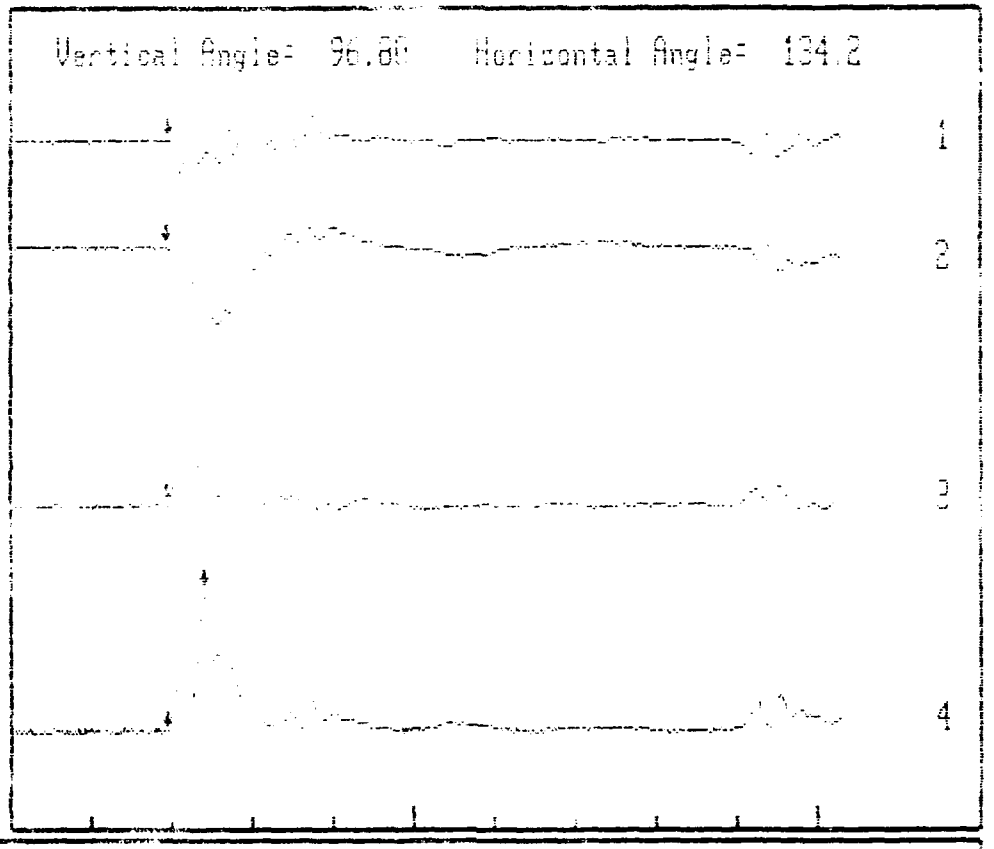
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 05-09-1990

Measurement Constants:

Transducer Units				
1st Integral Scaler				
2nd Integral Scaler				



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	11.77mS	-4.687 g's	-9.375 g's	-16.69 In/s		256mS	1
2	11.77mS	-27.34 g's	-27.34 g's	-55.02 In/s		256mS	1
3	11.77mS	28.12 g's	28.90 g's	65.84 In/s		256mS	1
4	11.77mS	39.06 g's	39.06 g's	77.90 In/s		256mS	1

Remarks

High Explosive Anti-Armor Pallet Shipping and Storage Container (CNU-480 E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 13 In, Temperature Amb F, Corner 1-4-5, Upper Standard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP 290 Hz -3 db.

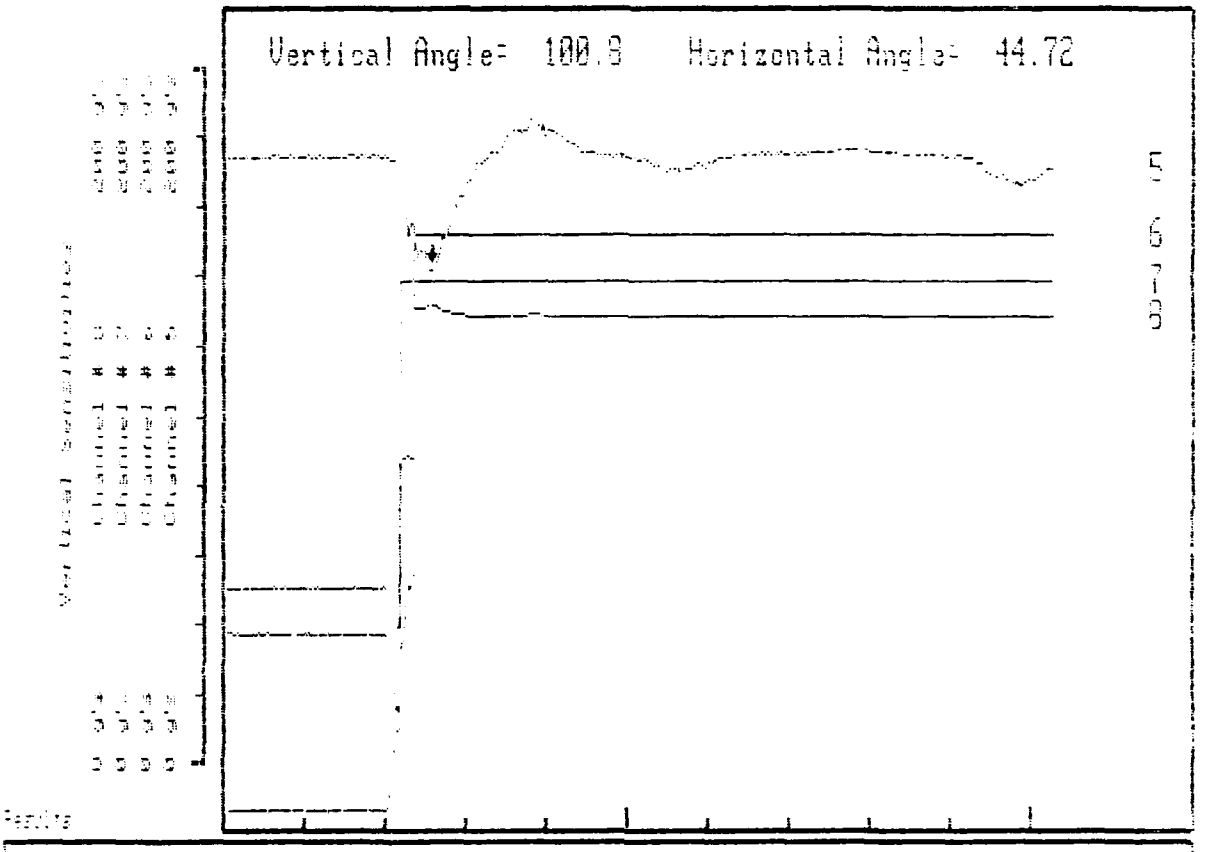
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 05-09-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50.0 g's/volt	50.0 g's/volt	50.0 g's/volt	50.0 g's/volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	64.51mS	-31.25 g's	-32.03 g's	-71.09 In/s		256mS	1
6	64.51mS	101.5 g's	101.5 g's	220.7 In/s		256mS	1
7	64.51mS	100.7 g's	100.7 g's	374.9 In/s		256mS	1
8	64.51mS	145.3 g's	146.0 g's	566.3 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 in, Temperature 140 F, Corner 1-4-5, Lower Port Accelerometer Over-ranged, Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 290 Hz -3db.

Test Sequences 10 and 11, Fed-Std-101C, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, -25 Degrees Fahrenheit, 18 Inch Drop Height.

Container Orientation Accelerometer	Peak Acceleration Response Vertical Gp	Transverse Gp	Longitudinal Gp	Resultant Gp
Top(1)				
Upper Starboard	76.6	7.3	3.9	81.3
Lower Port	--	2.6	0.8	--
Corner 3-4-6				
Upper Starboard	11.7	23.[illegible]	93.0	95.3
Lower Port	25.8	46.1	49.2	71.9
Corner 1-2-5				
Upper Starboard	7.0	15.6	53.1	54.7
Lower Port	2.3	53.1	22.7	56.2
Upper Starboard(2 nd)	14.8	77.3	34.4	84.4
Forward Side(5)				
Upper Starboard	--	--	--	--
Lower Port	2.3	24.2	43.0	47.6

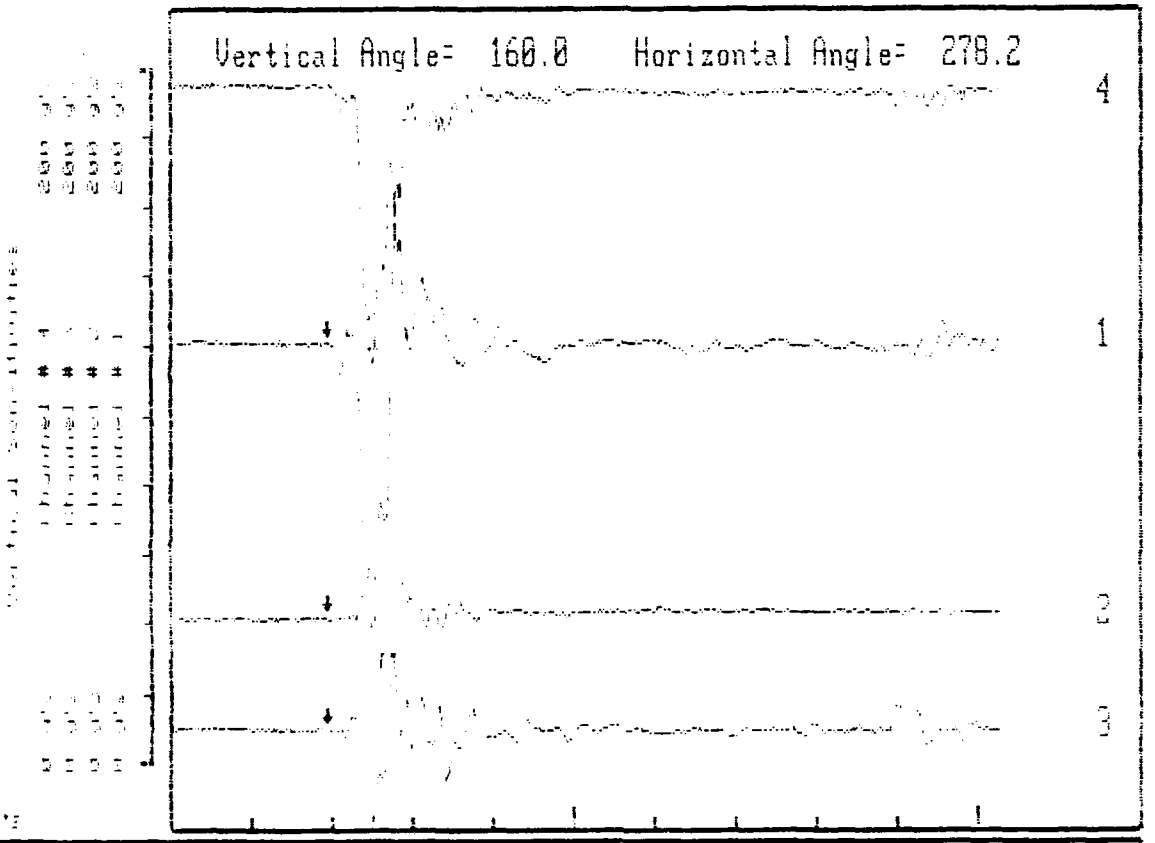
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 06-09-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50.g's/Volt	50.g's/Volt	50.g's/Volt	50.g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	14.33mS	-76.56 g's	-76.56 g's	-109.1 In/s		256mS	1
2	14.33mS	3.906 g's	7.812 g's	19.16 In/s		256mS	1
3	14.33mS	-27.34 g's	-27.34 g's	-24.11 In/s		256mS	1
4	14.33mS	-81.25 g's	-81.25 g's	-143.1 In/s		256mS	1

Remarks

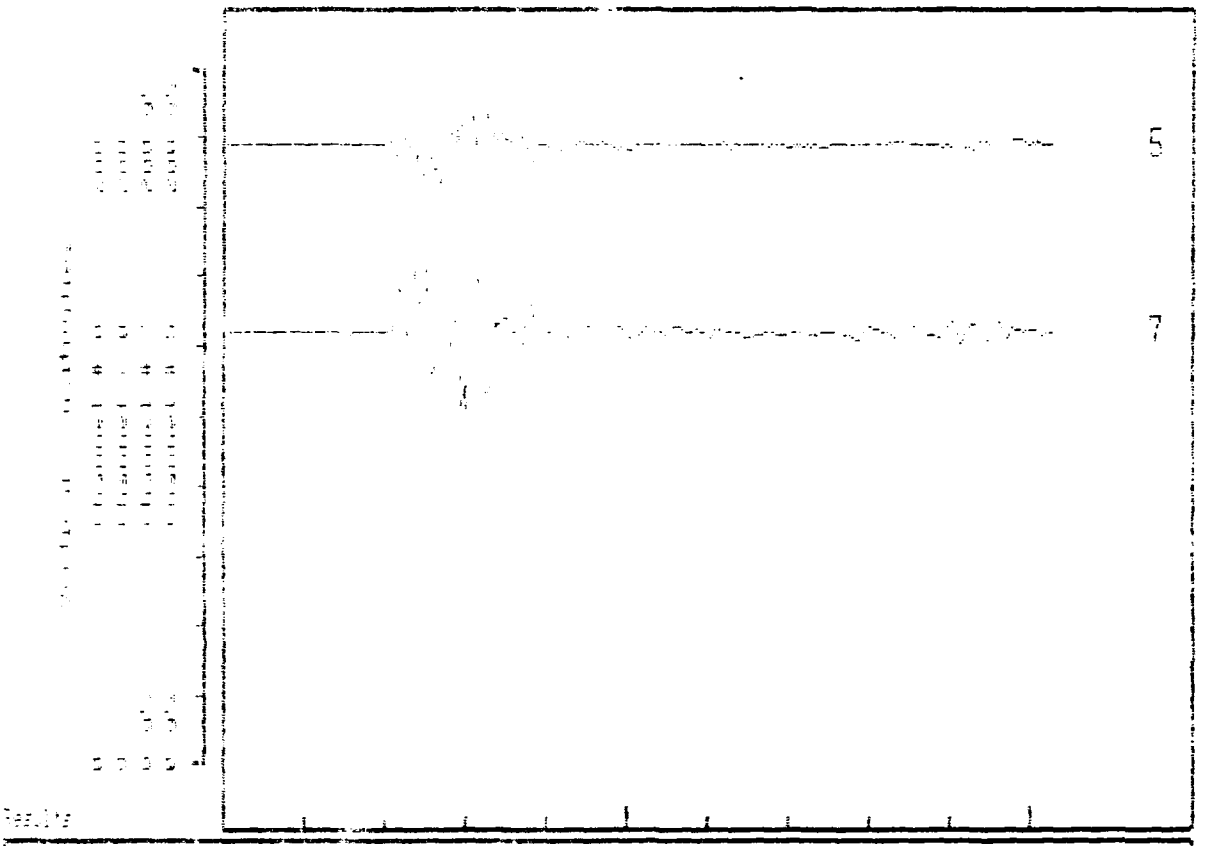
High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-483/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure 3, Drop Height 18 In., Temperature -25 F, Top Face 1, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Result, Filtered LP 290 F -3 db.

Waveform Test Report

AFFEA: HQ AFLC/DSTZ, TRIAD II-E

Test Agent: AF PACKAGING EVAL AGENCY Date of Test: 06-09-1990

Measurement Constants:



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	75.26mS	.7812 g's	-12.5 g's	-22.87 in/s		256mS	1
7	75.26mS	-22.65 g's	24.21 g's	23.80 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure 3, Drop Height 18 in, Temperature -25 F, Top Face 1, Lower Port Accelerometer Malfunction, Ch 5 - Long, Ch 6 - Vert, Ch 7 -Trans, Ch 8 - Resultant, Filtered LP 200 Hz -7 db.

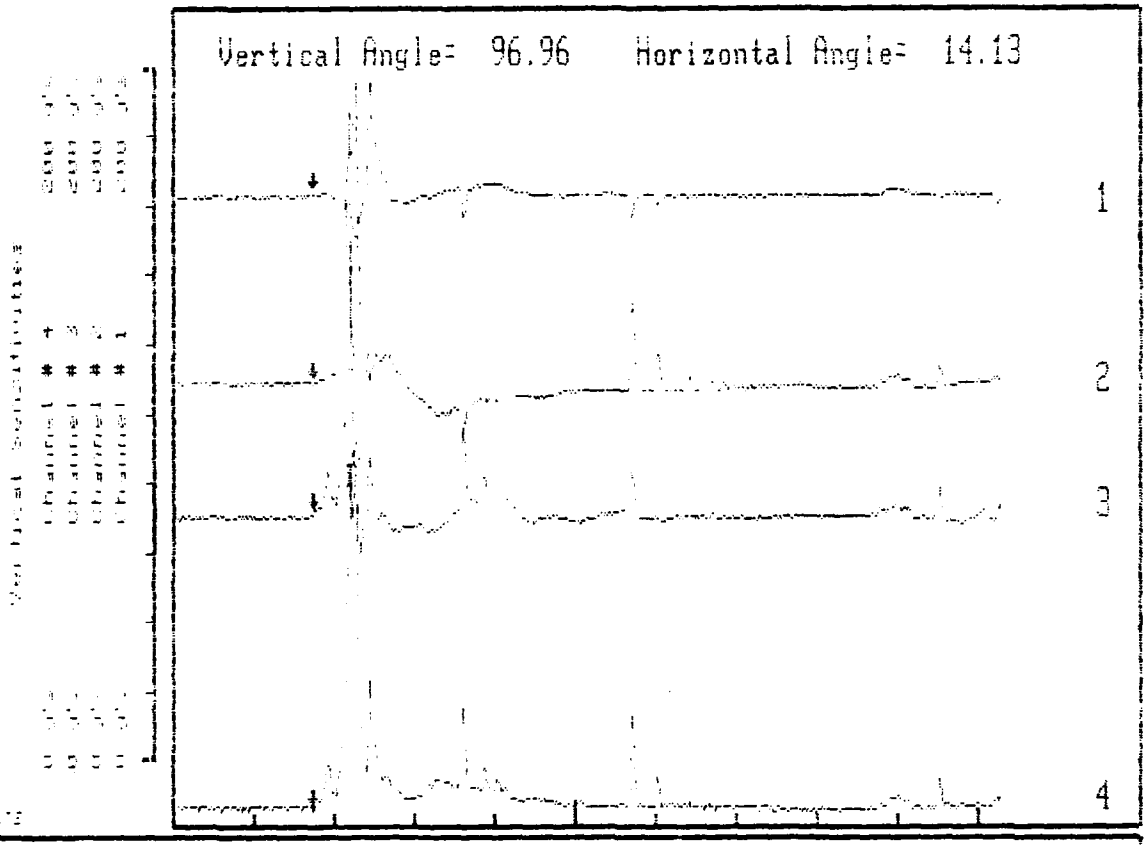
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 06-09-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50.g's/Volt	50.g's/Volt	50.g's/Volt	50.g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	13.31mS	-11.71 g's	-12.5 g's	-17.31 In/s		256mS	1
2	13.31mS	92.96 g's	93.75 g's	116.5 In/s		256mS	1
3	13.31mS	23.43 g's	79.68 g's	67.69 In/s		256mS	1
4	13.31mS	95.31 g's	103.1 g's	128.9 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Temperature -25 F, Corner 3-4-6, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Result, Filtered LP 290 Hz -3 db.

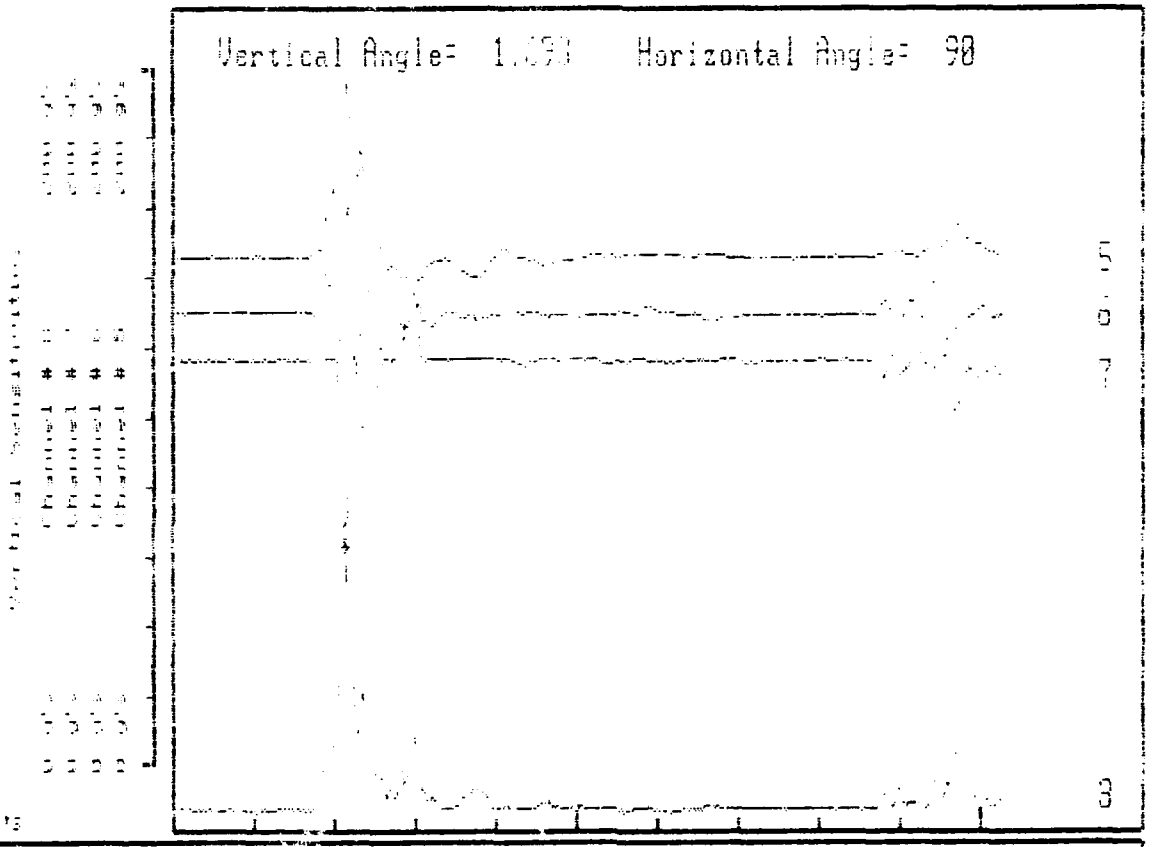
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 06-09-1990

Measurement Constants:

Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	53.24mS	49.21 g's	49.21 g's	63.98 In/s		256mS	1
6	53.24mS	25.78 g's	25.78 g's	21.02 In/s		256mS	1
7	53.24mS	-46.99 g's	-47.65 g's	-41.73 In/s		256mS	1
8	53.24mS	71.87 g's	71.87 g's	119.0 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In, Temperature -25 F, Corner 3-4-6, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Result, Filtered @ 290 Hz -3 db.

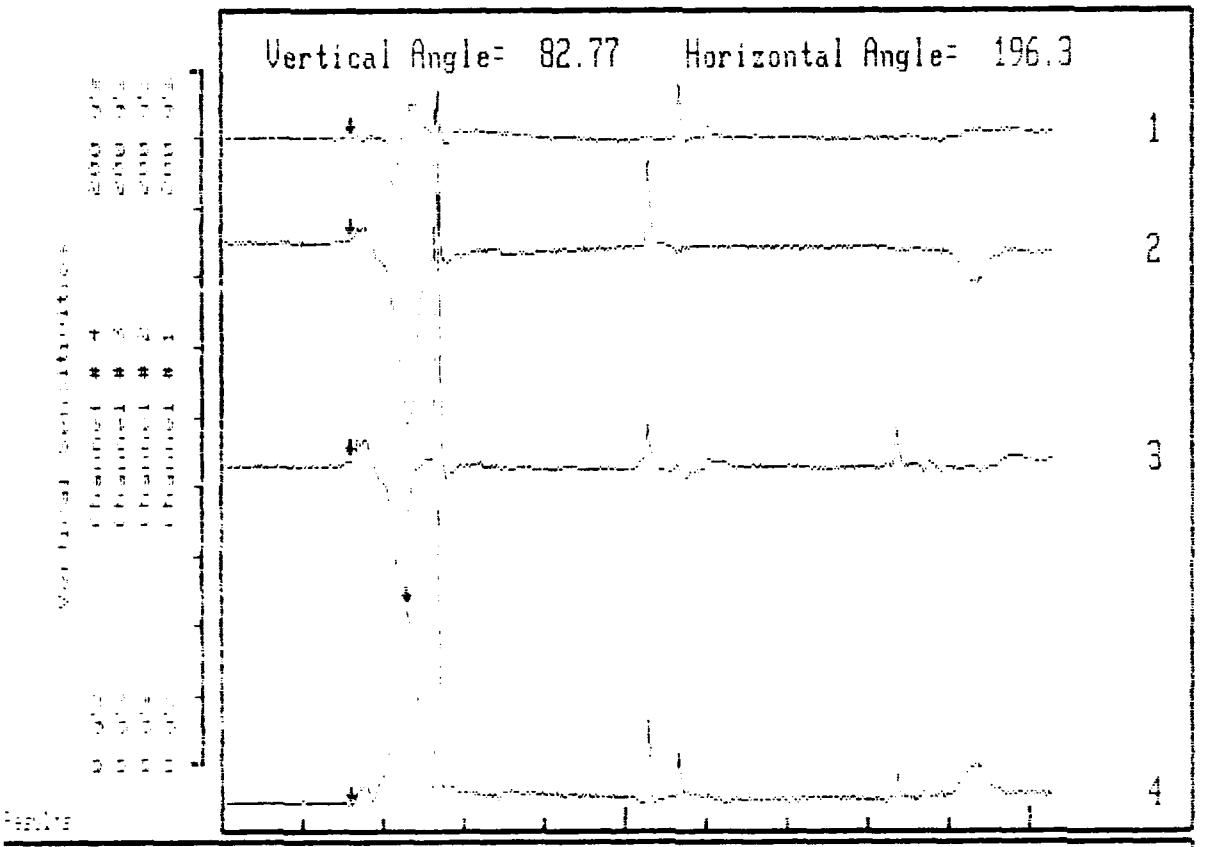
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 06-09-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50.g's/Volt	50.g's/Volt	50.g's/Volt	50.g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	17.92mS	7.031 g's	-13.28 g's	4.946 In/s		256mS	1
2	17.92mS	-53.12 g's	-53.12 g's	-86.86 In/s		256mS	1
3	17.92mS	-15.62 g's	-29.68 g's	-74.19 In/s		256mS	1
4	17.92mS	54.68 g's	54.68 g's	113.4 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-[illegible]/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In. Temperature -25 F. Corner 1-2-5, Upper Starboard Accelerometer: Ch 1 - Vert. Ch 2 - Long. Ch 3 - Trans. Ch 4 - Result, Filtered LP 290 Hz -3 Db.

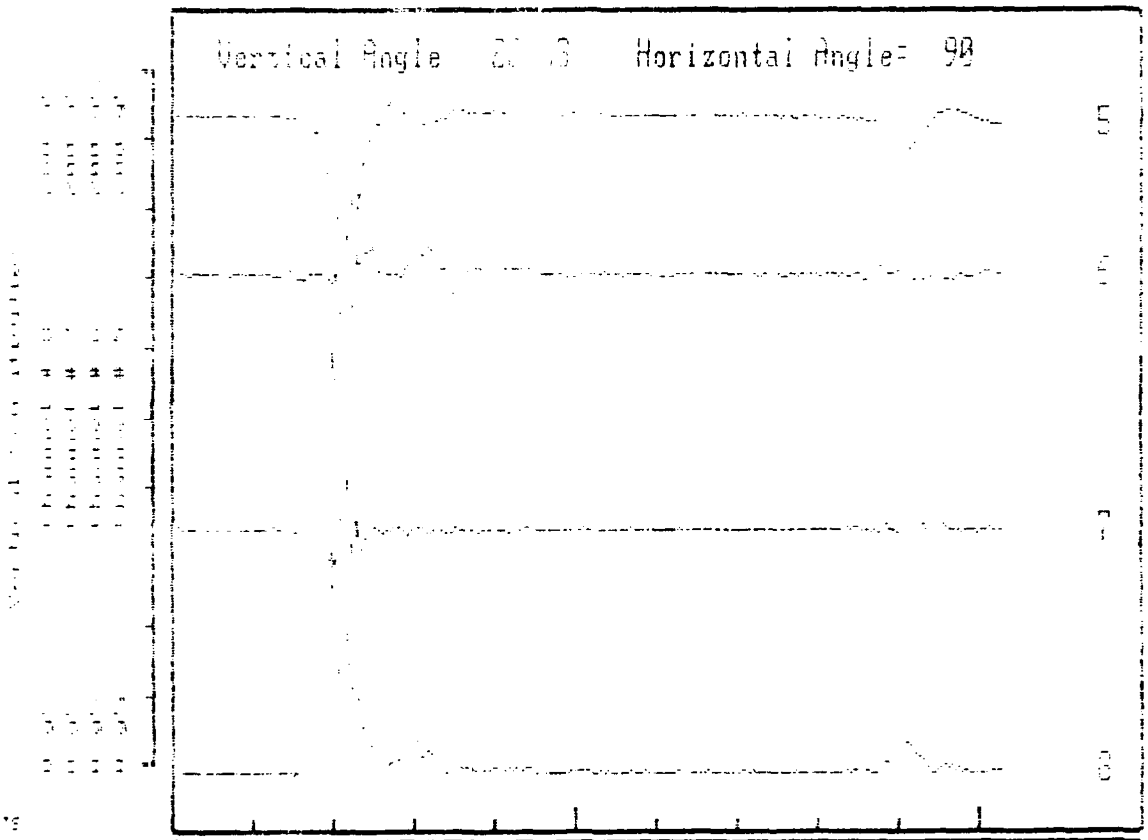
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 06-09-1990

Measurement Constants: [illegible]

	Ch [illegible]	Ch [illegible]	Ch [illegible]	Ch [illegible]
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	49.15mS	-22.65 g's	-25 g's	-18.23 In/s		256mS	1
6	49.15mS	-2.343 g's	-3.125 g's	-6.182 In/s		256mS	1
7	49.15mS	53.12 g's	53.12 g's	63.06 In/s		256mS	1
8	49.15mS	56.25 g's	56.25 g's	57.18 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container CNU-4[illegible](E), Fed-Std-[illegible], Method 5[illegible], Free Fall Drop Test, Procedure [illegible] Drop Height 18 In. Temperature -[illegible], Corner 1-2-[illegible], Lower Port Accelerometer: Ch 5 - Long. Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Result, Filtered LP [illegible] Hz -3 db.

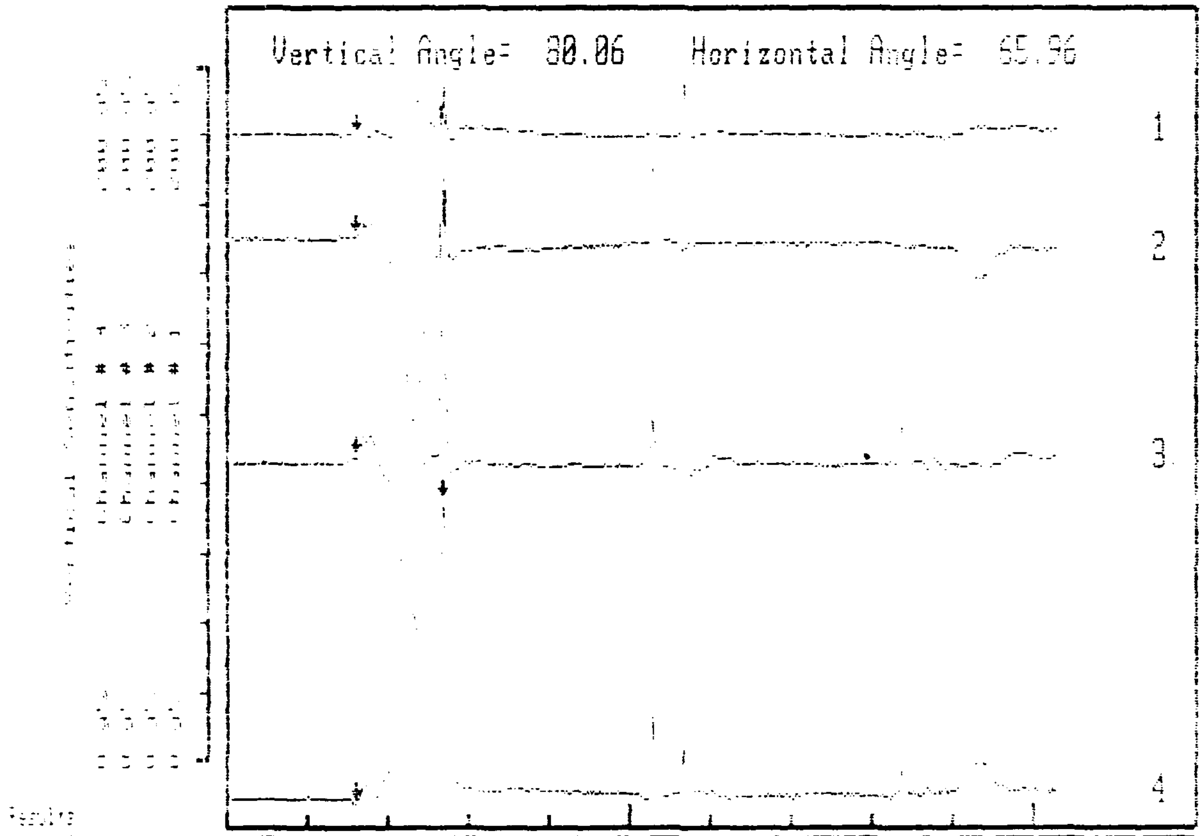
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 06-09-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50 g's/Volt	50 g's/Volt	50 g's/Volt	50 g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	27.64mS	14.84 g's	16.40 g's	34.31 In/s		256mS	1
2	27.64mS	34.37 g's	-53.12 g's	-141.2 In/s		256mS	1
3	27.64mS	77.34 g's	81.25 g's	-40.84 In/s		256mS	1
4	27.64mS	84.37 g's	90.62 g's	225.6 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible]. Fed-Std-101, Method [illegible], Free Fall Drop Test, Procedure G, Drop Height 18 In, Temperature -25 F, Corner 1-2-5, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Result, Filtered [illegible] Hz -3 db.

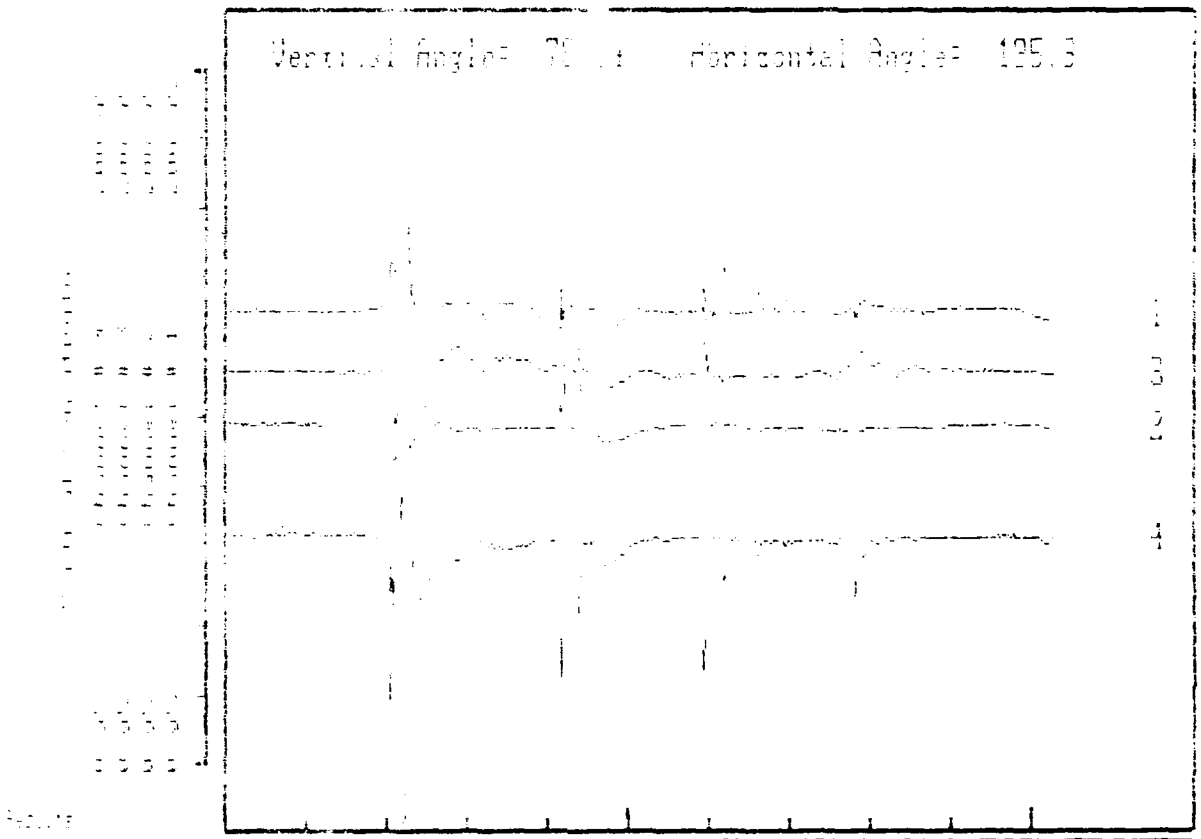
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 06-[illegible]-199[illegible]

Measurement Constants: [illegible]

Transducer [illegible]
1st Integral [illegible]
2nd Integral [illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	51.2mS	7.031 g's	7.031 g's	8.346 In/s		256mS	1
2	51.2mS	-33.59 g's	-51.56 g's	-46.67 In/s		256mS	1
3	51.2mS	-3.125 g's	-3.125 g's	-3.789 In/s		256mS	1
4	51.2mS	-34.37 g's	-51.56 g's	-54.09 In/s		256mS	1

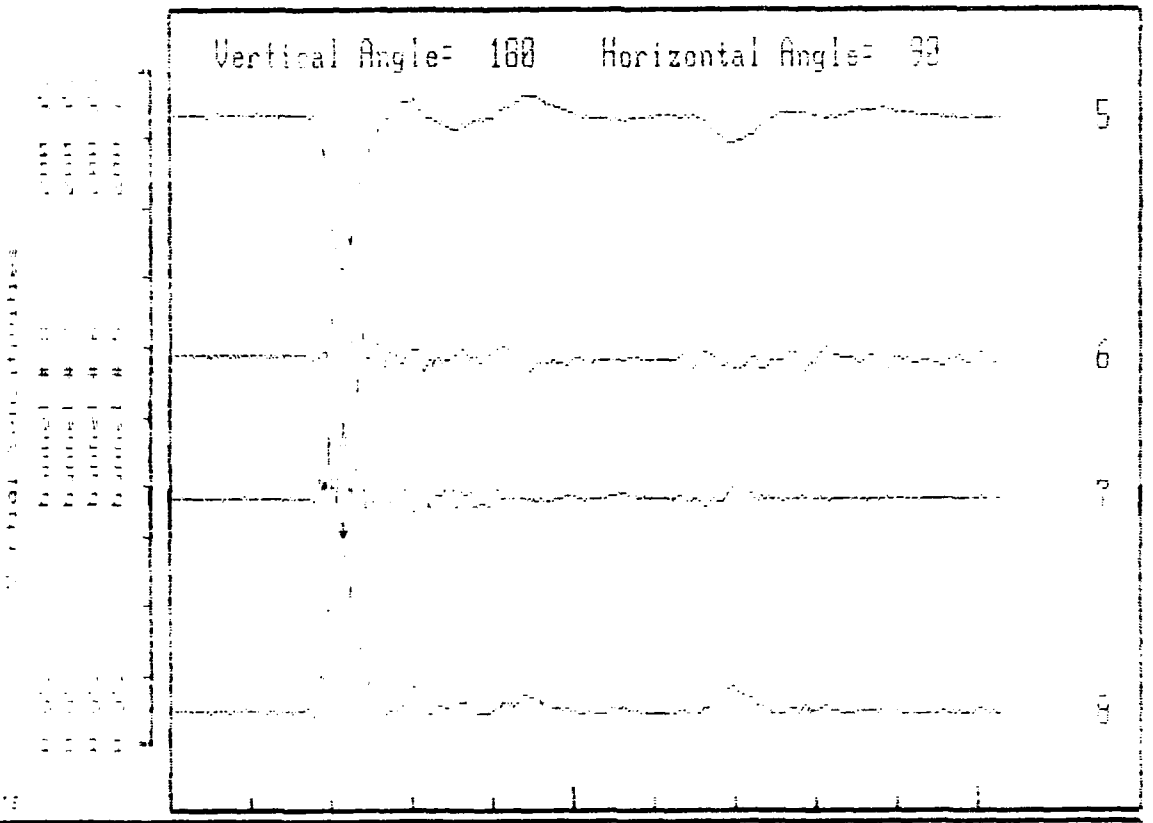
Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480 E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In, Temperature -[illegible] F, Forward Side E, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - [illegible] Ch 3 - Trans, Ch 4 - Result. Filtered LP [illegible] Hz -3 db, Detached.

Test Agent: AF PACKAGING EVAL AGENCY Date of Test: 06-09-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Serial	Engineering	Engineering	Engineering	Engineering
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	53.24mS	-42.96 g's	-45.31 g's	-85.93 In/s		256mS	1
6	53.24mS	-2.343 g's	12.5 g's	30.60 In/s		256mS	1
7	53.24mS	24.21 g's	24.21 g's	56.26 In/s		256mS	1
8	53.24mS	47.65 g's	47.65 g's	99.94 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-446/E), Ref-Std-781, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In, Temperature -25 F, Forward Side E, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Result, Filtered @ 2K Hz -3 db.

Test Sequence 12, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

Test Time Minutes	Test Pressure In Water (psig)		Leak Rate Psi per hour
0	43.3	(1.57)	--
68	42.5	(1.54)	0.026
75	42.3	(1.53)	0.036

Test Sequence 14, Fed-Std-101C, Method 5[illegible], Superimposed Load Test.

Dimension Orientation	Container Dimensions Pre-Test Inches	Loaded 1 Hr. Inches	Post-Test Inches
Vertical Corner 2-6	15.2	15.4	15.4
Vertical Corner 2-5	15.4	15.4	15.4
Vertical Corner 4-5	15.4	15.4	15.4
Vertical Corner 4-6	15.4	15.4	15.4
Diagonal(1-2-6)-(2-3-5)	49	49	49
Diagonal(3-4-6)-(1-4-5)	48.5	48.5	48.5

Note: The container was loaded with a 3063 pound uniformly distributed load centered on the container for 67 minutes.

Test Sequence 15, MIL-STD-648A, 5.8.3, Hoisting Fittings Strength Test.

Hoisted Time Minutes	Superimposed Load Pounds	Damage or Deformation
26	542	None

Test Sequence 16, MIL-STD-648A, 5.8.5, Single Hoisting Fitting Strength Test.

Fitting Location	Hoisted Time Minutes	Damage or Deformation
Aft End	5	None
Forward End	5.5	None

Test Sequence 17, MIL-STD-648A, 5.4.8, Tiedown Strength Test.

Base Load Direction	Base Load Longitudinal Pounds	Base Load Lateral Pounds	Loaded Time Minutes	Damage or Deformation
Forward/ Lateral	410	200	2	None
Rotated 180 Degrees Aft/ Lateral	450	204	1	None

Note: The container is secured by tiedown provisions in four point configuration with chain. The loads are applied to the container base along respective container centerlines.

Test Sequence 19, Fed-Std-101C, Method 5009.1, Leaks in Containers, 6.3, Pneumatic Pressurization Technique.

Test Time Minutes	Test Pressure Inches Water	(psig)	Leak Rate Psi per Hour
0	43.9	(1.59)	
60	42.9	(1.55)	0.036
75	42.8	(1.55)	0.032

Test Sequence 20, MIL-STD-648A, 5.5.2.1 Structural Integrity Test.

	Test Time Minutes	Test Pressure Inches Water	(psig)	Damage or Deformation
Pressure	0	+56.2	(2.0)	
	15	+55.6	(2.0)	None
Vacuum	0	-43.5	(-1.58)	
	35	-41.6	(-1.51)	None

Test Sequence 22, Fed-Std-101C, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, Ambient Temperature, 18 Inch Drop Height, Filtered 125 Hz L.P.

Container Orientation Accelerometer	Peak Acceleration Vertical Gp	Transverse Gp	Longitudinal Gp	Resultant Gp
Bottom(3)				
Lower Port	73.4	1.6	3.9	73.4
Upper Starboard	59.4	4.7	1.6	58.6
Port Side(2)				
Lower Port	2.3	73.4	3.9	73.4
Upper Starboard	10.2	85.9	1.6	87.5
Corner 2-3-6				
Lower Port	13.3	13.3	29.7	37.5
Upper Starboard	15.6	16.4	23.4	33.6
Corner 1-4-5				
Lower Port	5.5	11.7	36.7	40.6
Upper Starboard	15.6	18.0	30.5	37.5
Top(1)				
Lower Port	43.8	18.8	1.6	46.9
Upper Starboard	52.3	19.5	3.1	55.5
Corner 3-4-6				
Lower Port	18.0	19.5	29.7	42.2
Upper Starboard	6.2	23.4	27.3	35.9
Corner 1-2-5				
Lower Port	14.8	21.1	32.8	40.6
Upper Starboard	18.8	28.1	26.6	43.0
Forward End(5)				
Lower Port	7.0	1.6	32.0	33.6
Upper Starboard	0.8	0	26.6	25.8
Bottom(3) 2 nd Drop				
Lower Port	81.3	11.7	2.3	82.0
Upper Starboard	53.1	3.1	1.6	53.1

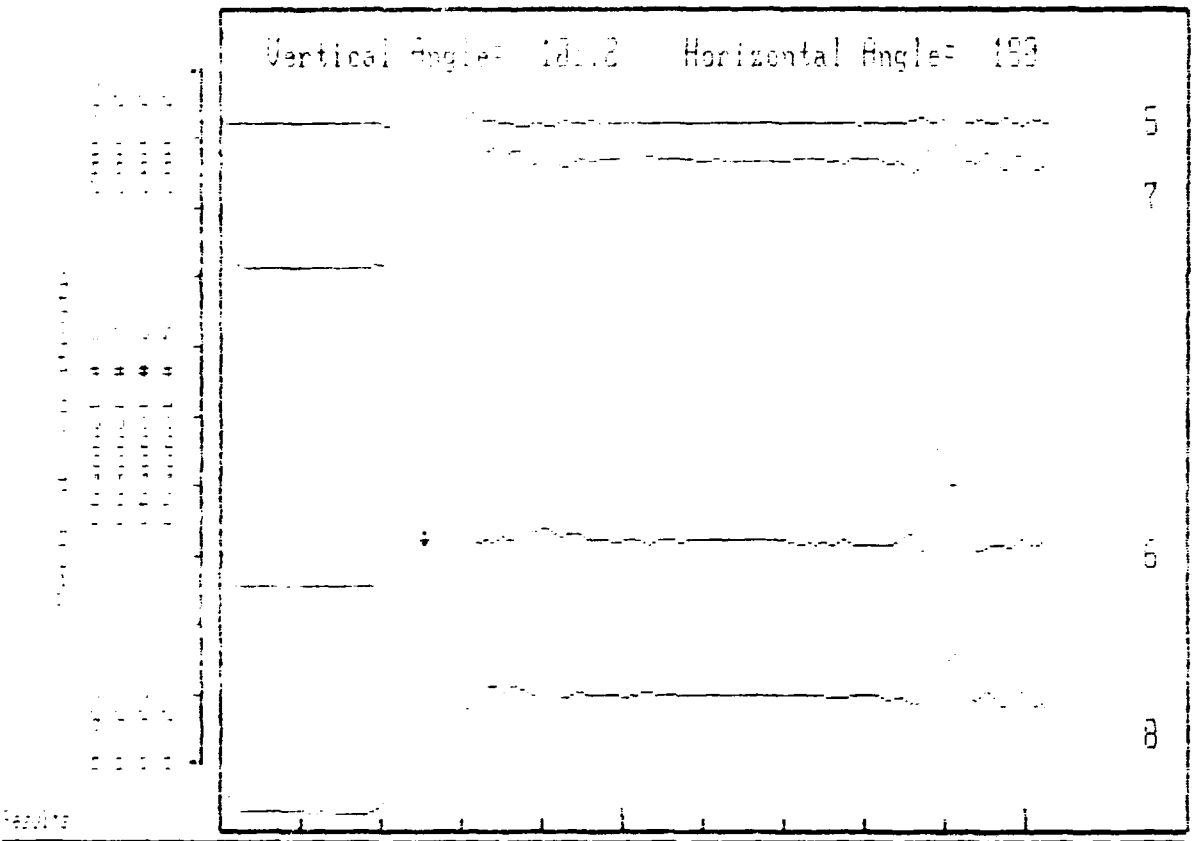
Waveform Test Report

AFPEA; HQ AFLC/D9TZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



CH	TIME	DUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	63.48mS	-3.906 g's	4.687 g's	0 in/s		256mS	1
6	63.48mS	73.43 g's	73.43 g's	187.5 in/s		256mS	1
7	63.48mS	1.562 g's	12.5 g's	12.98 in/s		256mS	1
8	63.48mS	73.43 g's	73.43 g's	188.5 in/s		256mS	1

Remarks

High G Disdave Anti-Armor Rocket Shipping and Storage Container DND-480/E, Pre-Stability, Method [illegible], Free Fall Drop Test, Procedure G, Drop Height 48 in, Amb. Temperature, Bottom Face 7, Lower Port Accelerometer; CH 5 - Long, CH 6 - Vert, CH 7 - Trans, CH 8 - Resultant, Filtered @ 125 Hz -3 db.

1st

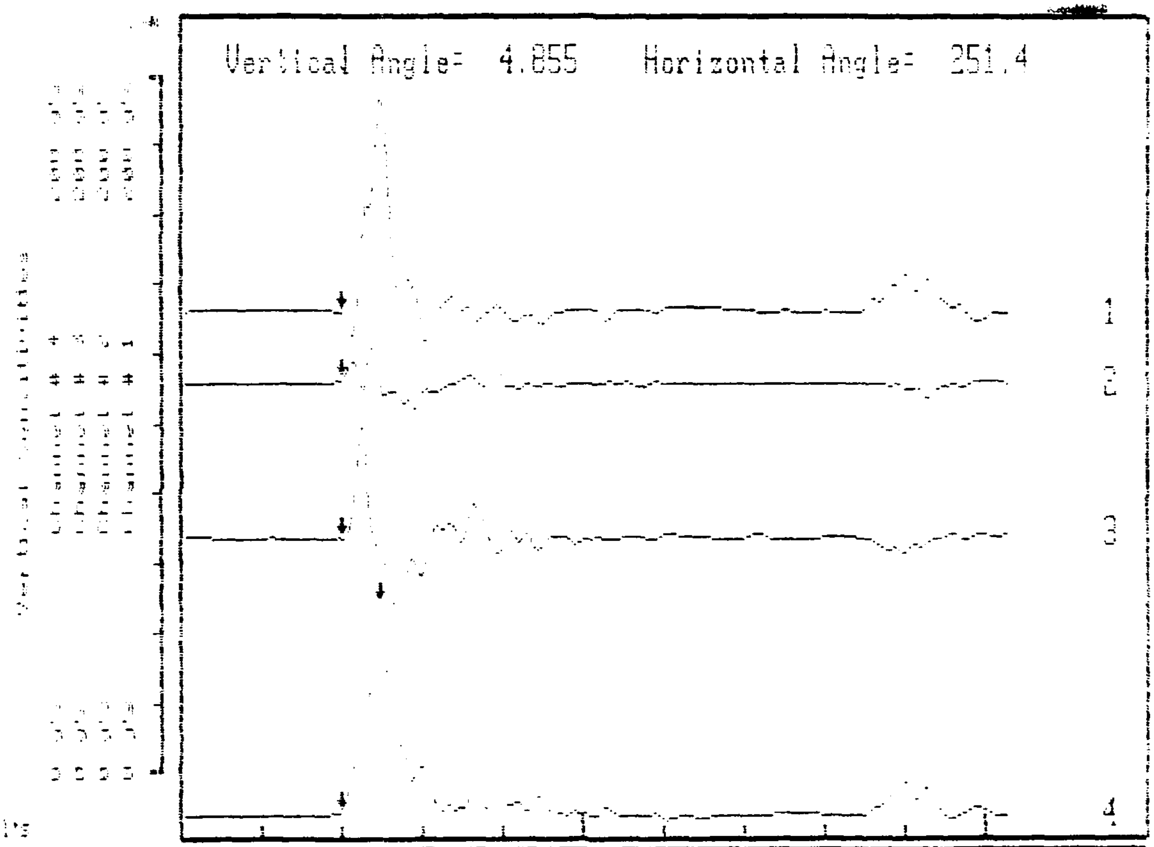
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50 g's/Volt	50 g's/Volt	50 g's/Volt	50 g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	12.28mS	59.37 g's	59.37 g's	75.11 In/s		256mS	1
2	12.28mS	-1.562 g's	10.93 g's	19.47 In/s		256mS	1
3	12.28mS	-4.687 g's	31.25 g's	13.91 In/s		256mS	1
4	12.28mS	58.59 g's	58.59 g's	123.9 In/s		256mS	1

Remarks

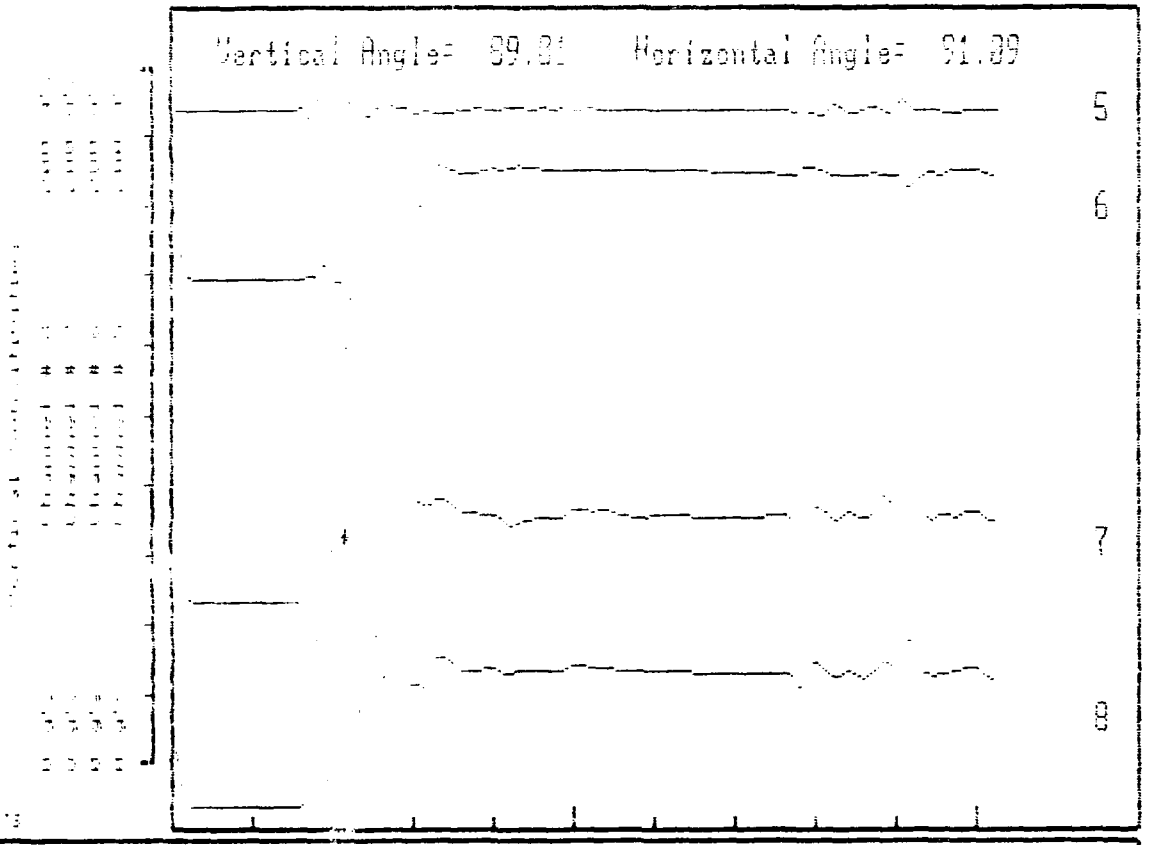
High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In. Amb. Temperature, Bottom Face 3, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 Resultant, Filtered LP 125 Hz -3 db.

Waveform Test Report

AFPEA: HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	53.76mS	3.906 g's	4.687 g's	-12.05 In/s		256mS	1
6	53.76mS	-2.343 g's	12.5 g's	11.12 In/s		256mS	1
7	53.76mS	73.43 g's	73.43 g's	87.48 In/s		256mS	1
8	53.76mS	73.43 g's	73.43 g's	142.1 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Bracing and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In, Amb. Temperature, Side Face 1, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 125 Hz -3 db.

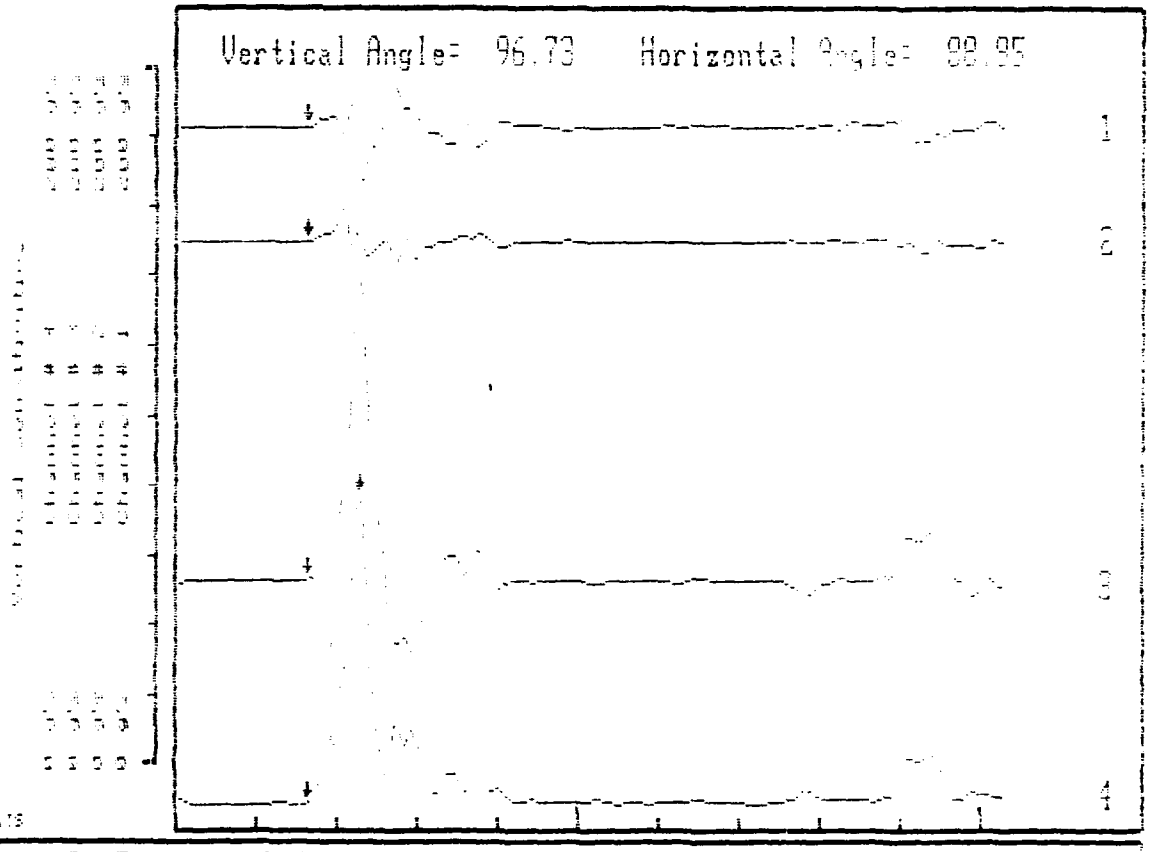
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50.g's/Volt	50.g's/Volt	50.g's/Volt	50.g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	16.38mS	-10.15 g's	-10.15 g's	8.655 in/s		256mS	1
2	16.38mS	1.562 g's	9.375 g's	17.92 in/s		256mS	1
3	16.38mS	85.93 g's	85.93 g's	109.7 in/s		256mS	1
4	16.38mS	87.5 g's	87.5 g's	190.4 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In, Amb. Temperature, Side Face 2, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Longitudinal, Filtered @ 125 Hz -3db.

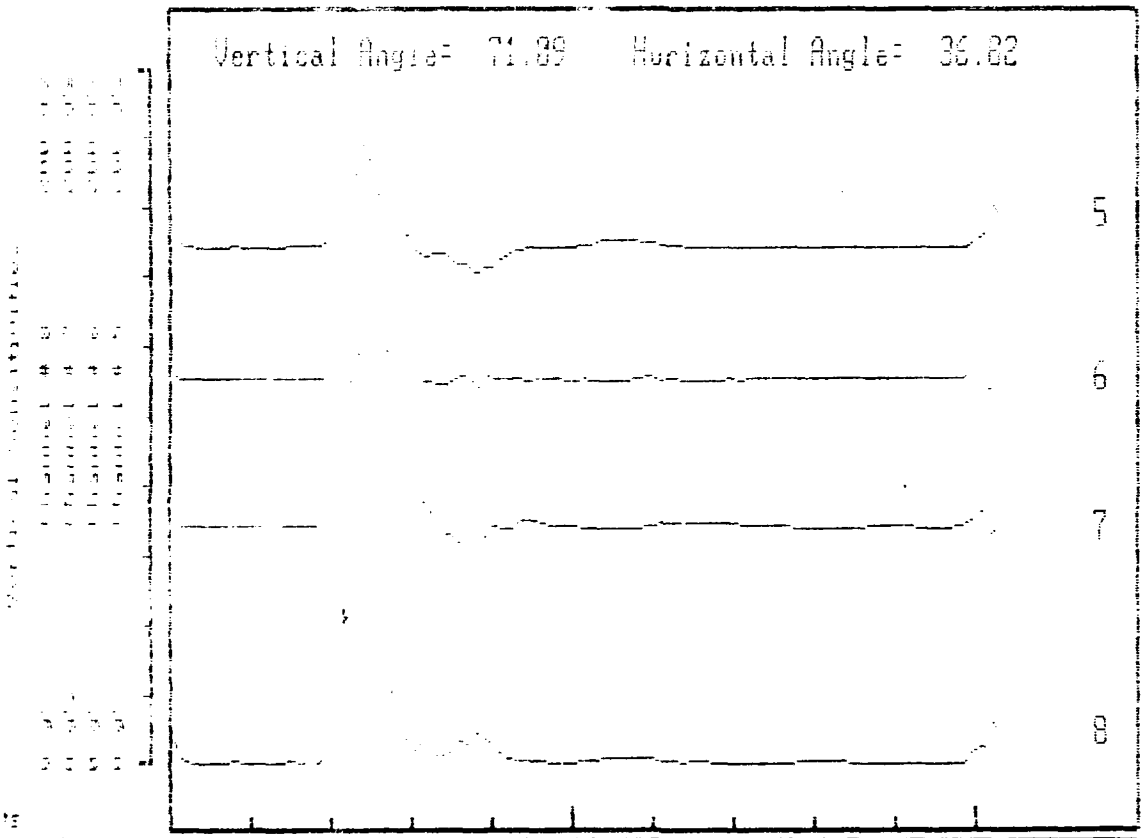
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50 g = Volt	50 g = Volt	50 g = Volt	50 g = Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	53.76mS	29.68 g's	29.68 g's	36.47 In/s		256mS	1
6	53.76mS	13.28 g's	22.65 g's	47.29 In/s		256mS	1
7	53.76mS	13.28 g's	16.40 g's	30.60 In/s		256mS	1
8	53.76mS	37.5 g's	37.5 g's	63.98 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-4[illegible]/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure [illegible], Drop Height 18 In, Amb. Temperature, Corner [illegible], Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 125 Hz -3 db.

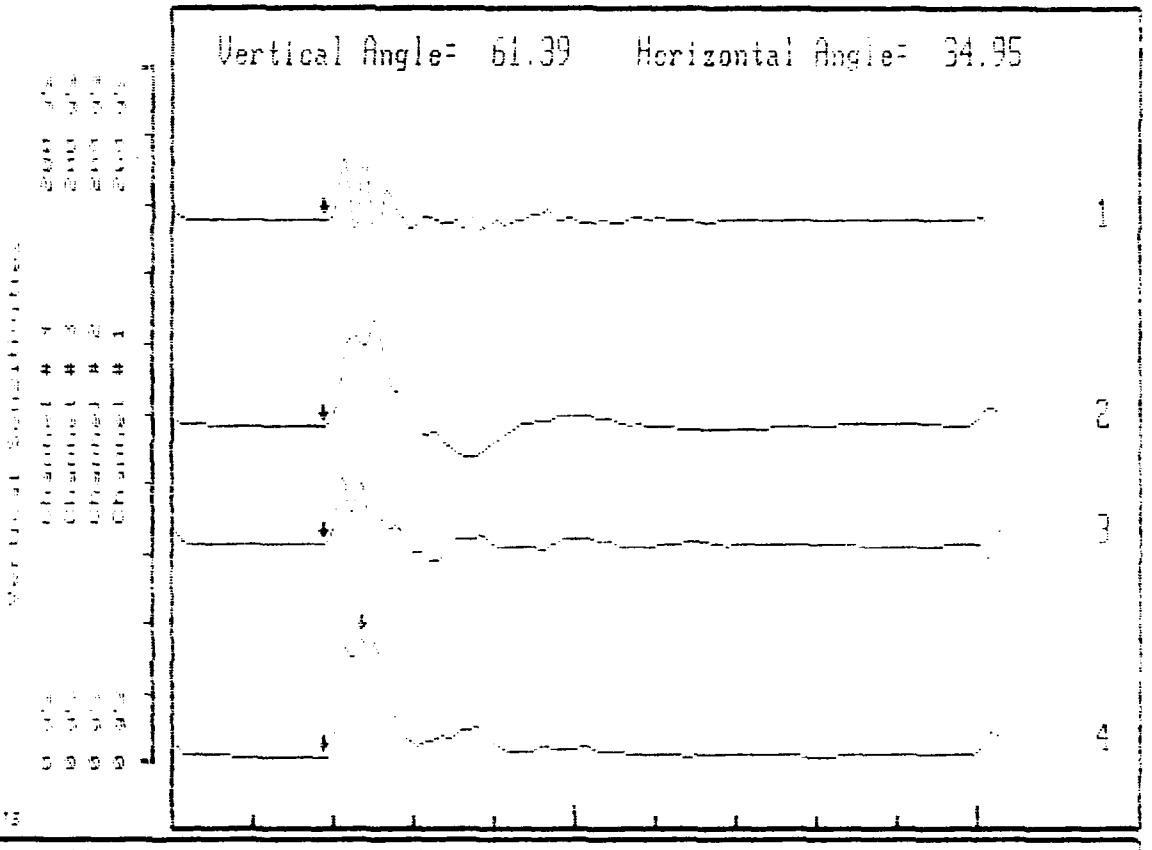
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50.g s /Volt	50.g s /Volt	50.g s /Volt	50.g s /Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	12.28mS	15.62 g's	17.18 g's	29.98 In/s		256mS	1
2	12.28mS	23.43 g's	26.56 g's	76.35 In/s		256mS	1
3	12.28mS	16.40 g's	17.96 g's	35.54 In/s		256mS	1
4	12.28mS	33.59 g's	33.59 g's	104.4 In/s		256mS	1

Remarks

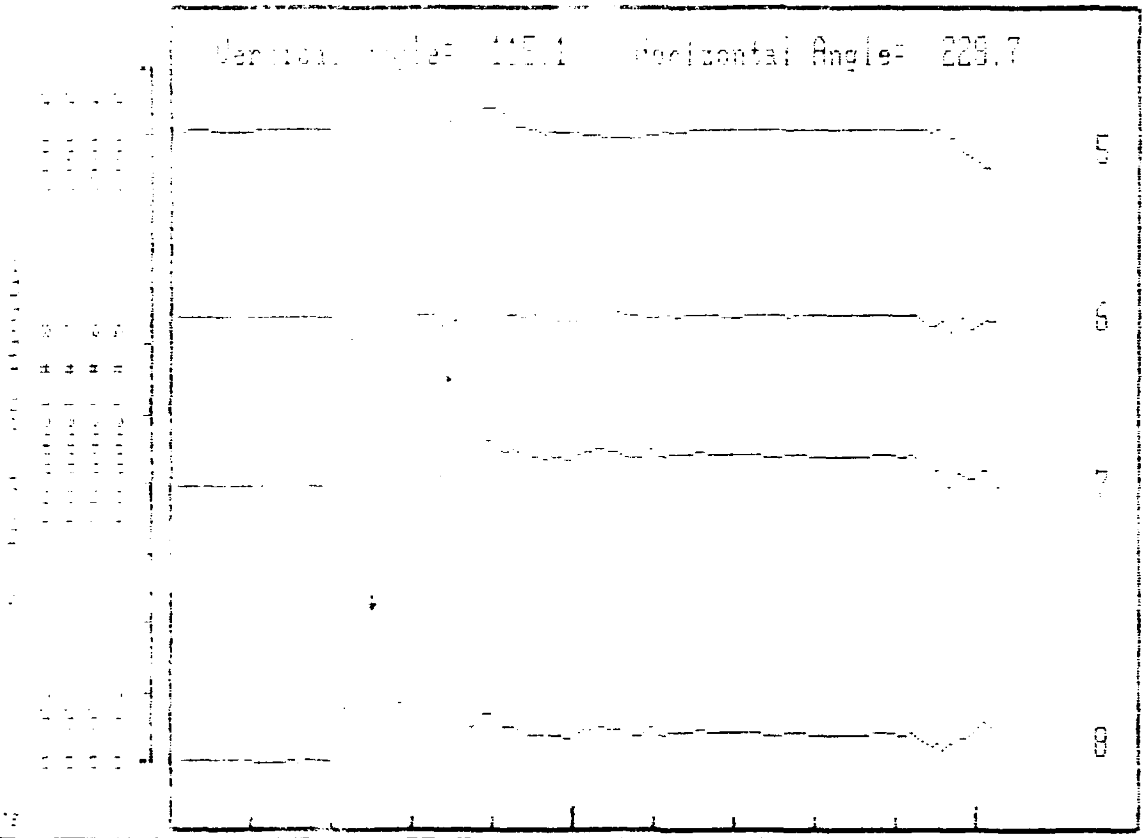
High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E1, Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Amb. Temperature, Corner 2-3-6, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP 125 Hz -3db.

Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	62.46mS	-36.71 g's	-36.71 g's	-95.83 In/s		256mS	1
6	62.46mS	-5.460 g's	-18.75 g's	-64.91 In/s		256mS	1
7	62.46mS	11.71 g's	-11.71 g's	-9.892 In/s		256mS	1
8	62.46mS	40.62 g's	40.62 g's	133.5 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible], Fed-Std-101, Method [illegible] Free Fall Drop Test, Procedure [illegible], Drop Height [illegible], Amb. Temperature, Corner [illegible], Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant. Filtered LP [illegible] Hz [illegible] db.

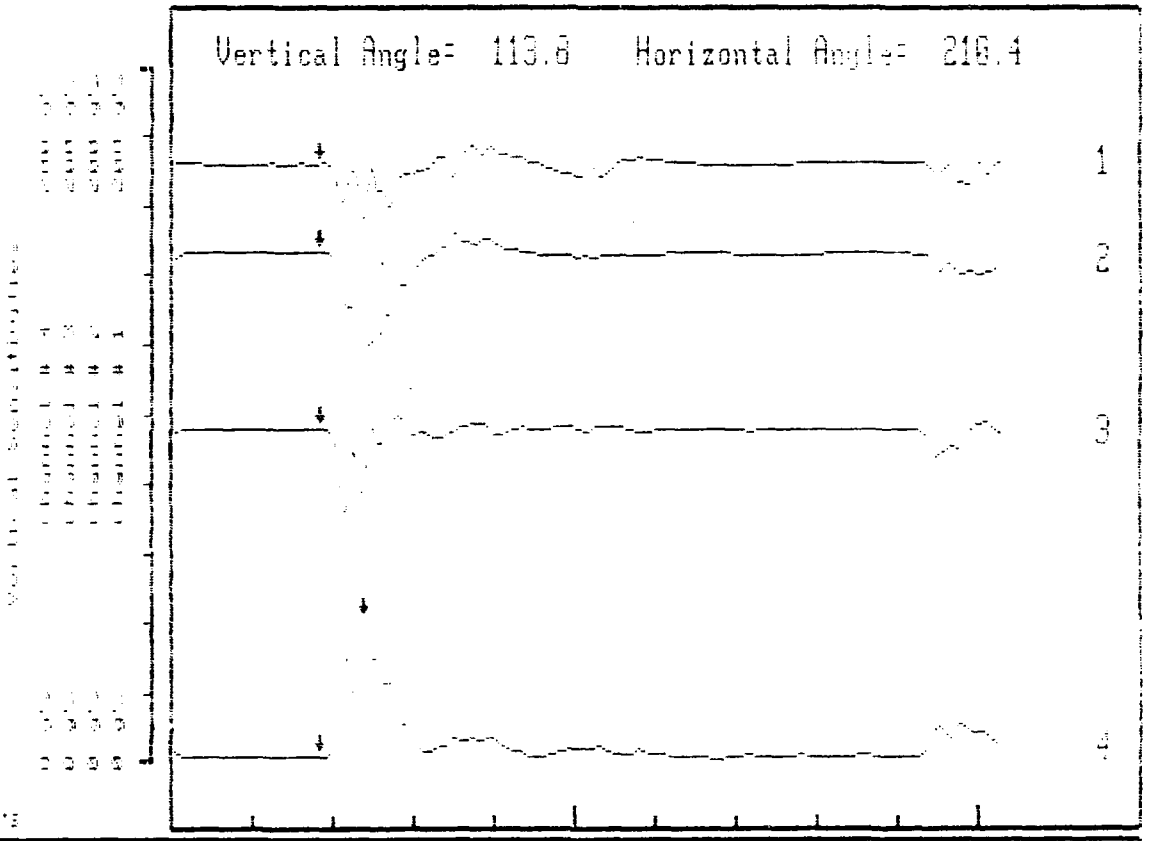
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50.g's/volt	50.g's/volt	50.g's/volt	50.g's/volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	13.82mS	-15.62 g's	-15.62 g's	-21.02 In/s		256mS	1
2	13.82mS	-30.46 g's	-30.46 g's	-61.20 In/s		256mS	1
3	13.82mS	-17.96 g's	-23.43 g's	-52.55 In/s		256mS	1
4	13.82mS	37.5 g's	37.5 g's	70.17 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E). Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In. Amb. Temperature, Corner 1-4-5, Outer Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant. Filtered LP 125 Hz -3 db.

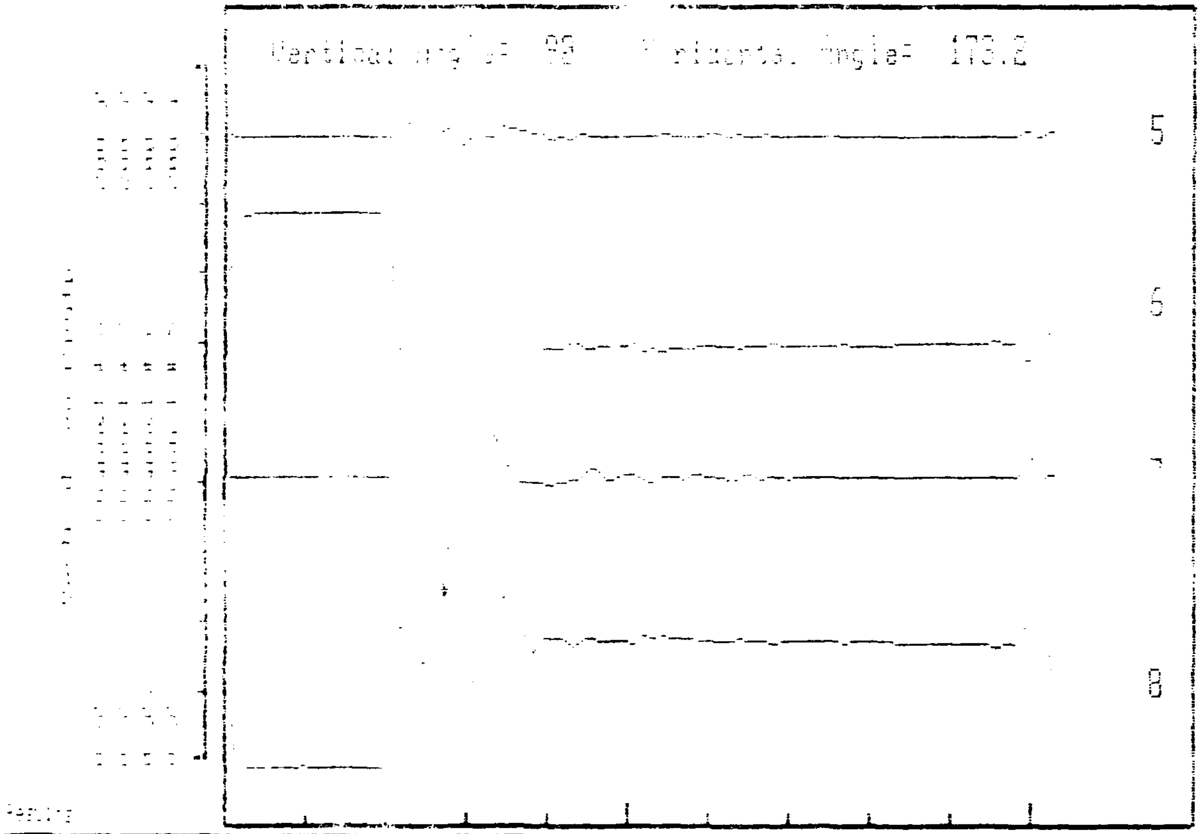
Waveform Test Report

AFPEA: HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants: [illegible]

Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	68.09mS	1.562 g's	-4.687 g's	2.473 In/s		256mS	1
6	68.09mS	-43.75 g's	-43.75 g's	-242.3 In/s		256mS	1
7	68.09mS	-18.75 g's	20.31 g's	10.20 In/s		256mS	1
8	68.09mS	46.87 g's	46.87 g's	251.6 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-[illegible]),
Fed-Std-101, Method [illegible] Free Fall Drop Test, Procedure [illegible], Drop Height [illegible] In,
Amb. Temperature, Top Face [illegible], Lower Port Accelerometer: Ch 5 - Long, Ch [illegible] -
Vert, [illegible] - Trans, Ch 8 - Resultant, Filtered [illegible] Hz [illegible] db.

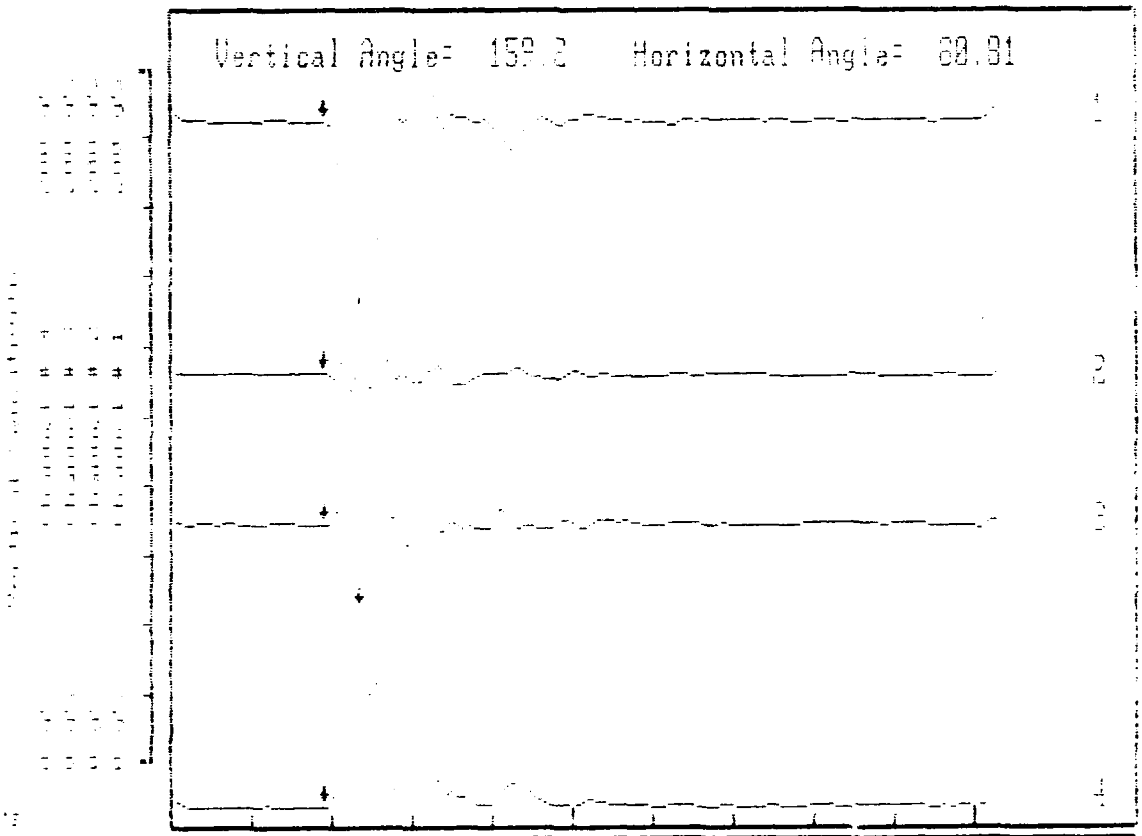
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants: [illegible]

Transducer Output [illegible]
1st Integral Scaler [illegible]
2nd Integral Scaler [illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	11.26mS	-52.34 g's	-52.34 g's	-90.88 In/s		256mS	1
2	11.26mS	3.125 g's	-5.468 g's	-1.236 In/s		256mS	1
3	11.26mS	19.53 g's	19.53 g's	2.163 In/s		256mS	1
4	11.26mS	55.46 g's	55.46 g's	90.88 In/s		256mS	1

Remarks

[illegible] Anti-Armor [illegible] Shipping and Storage Container [illegible], Fed-Std-[illegible], Method [illegible], Free Fall Drop Test, Procedure [illegible], Drop Height [illegible] In. Amb. Temperature. [illegible] Starboard Accelerometers: Ch 1 - Vert, Ch 2 Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered [illegible]

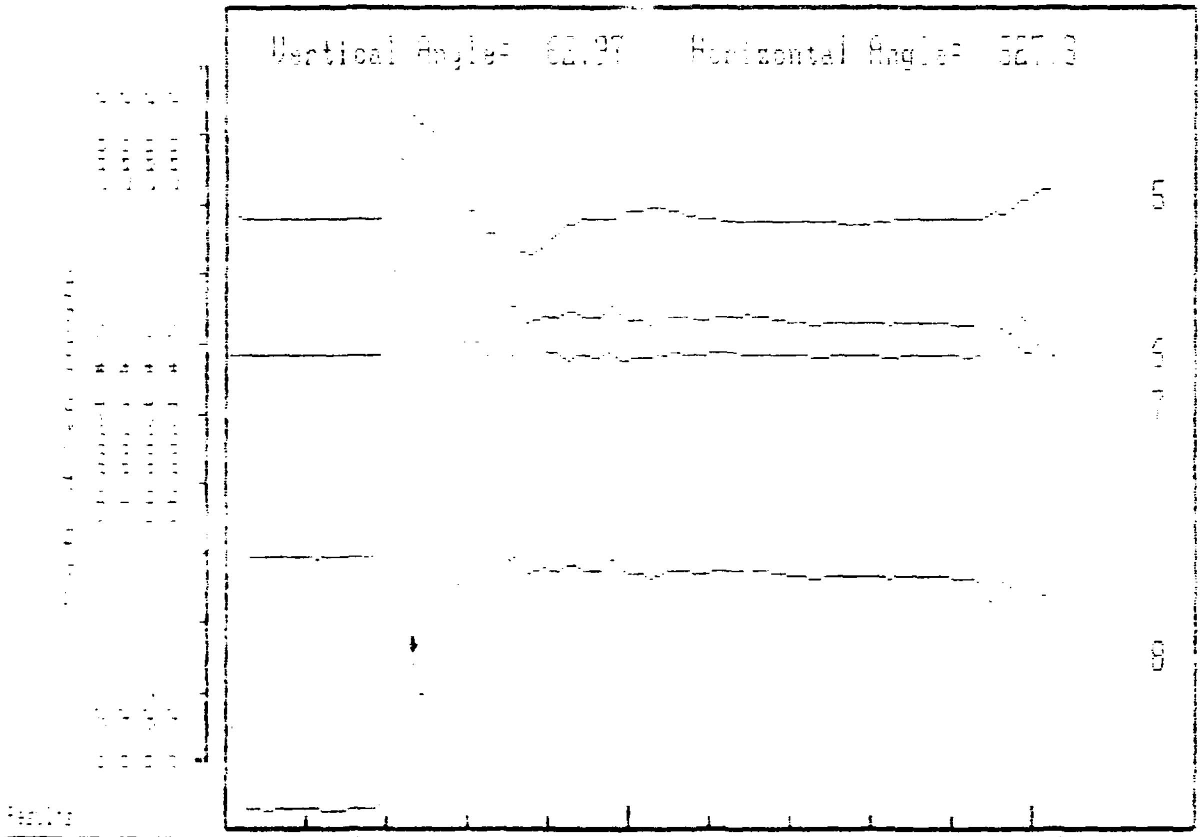
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	386.4	386.4
2nd Integral Scaler			[illegible]	[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	57.85mS	29.68 g's	29.68 g's	62.75 In/s		256mS	1
6	57.85mS	17.96 g's	24.21 g's	34.62 In/s		256mS	1
7	57.85mS	-19.53 g's	27.34 g's	-29.36 In/s		256mS	1
8	57.85mS	42.18 g's	42.18 g's	108.8 In/s		256mS	1

Remarks

[illegible] Explosive Anti-Armor Rocket Shipping and Storage Container [illegible] [illegible], Met [illegible] Free Fall Drop Test, Procedure [illegible] Drop Height 18 In. [illegible] Temperature, Corner [illegible], Lower Port Accelerometer: Ch 5 - Long. Ch 6 - Vert. Ch 7 - Trans. Ch 8 - Resultant. Filtered LP 125 Hz -[illegible]db.

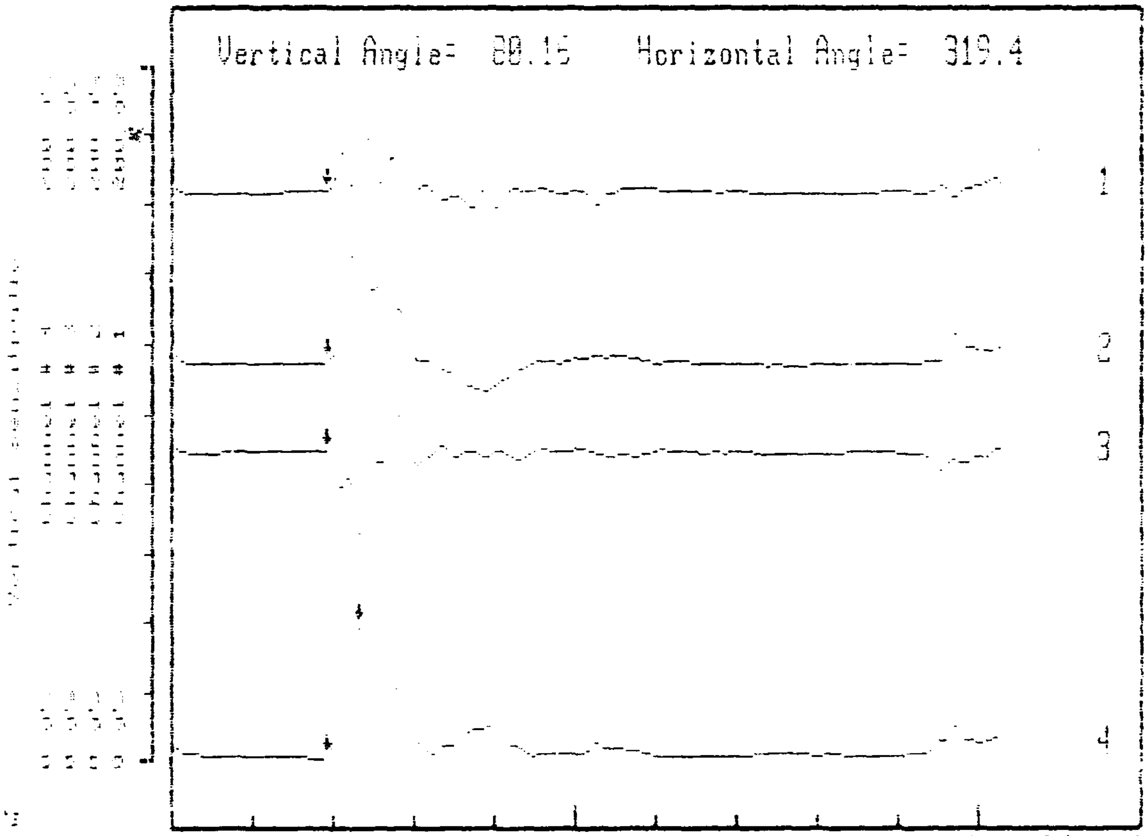
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	Single Volt	Single Volt	Single Volt	Single Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	10.24mS	6.25 g's	10.93 g's	9.892 In/s		256mS	1
2	10.24mS	27.34 g's	30.46 g's	64.60 In/s		256mS	1
3	10.24mS	-23.43 g's	-23.43 g's	-42.04 In/s		256mS	1
4	10.24mS	35.93 g's	35.93 g's	64.60 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible]
Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure [illegible], Drop Height [illegible] In.
Amb. Temperature, Corner [illegible], Upper Standard Accelerometer: Ch 1 - Vert.
Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered [illegible]

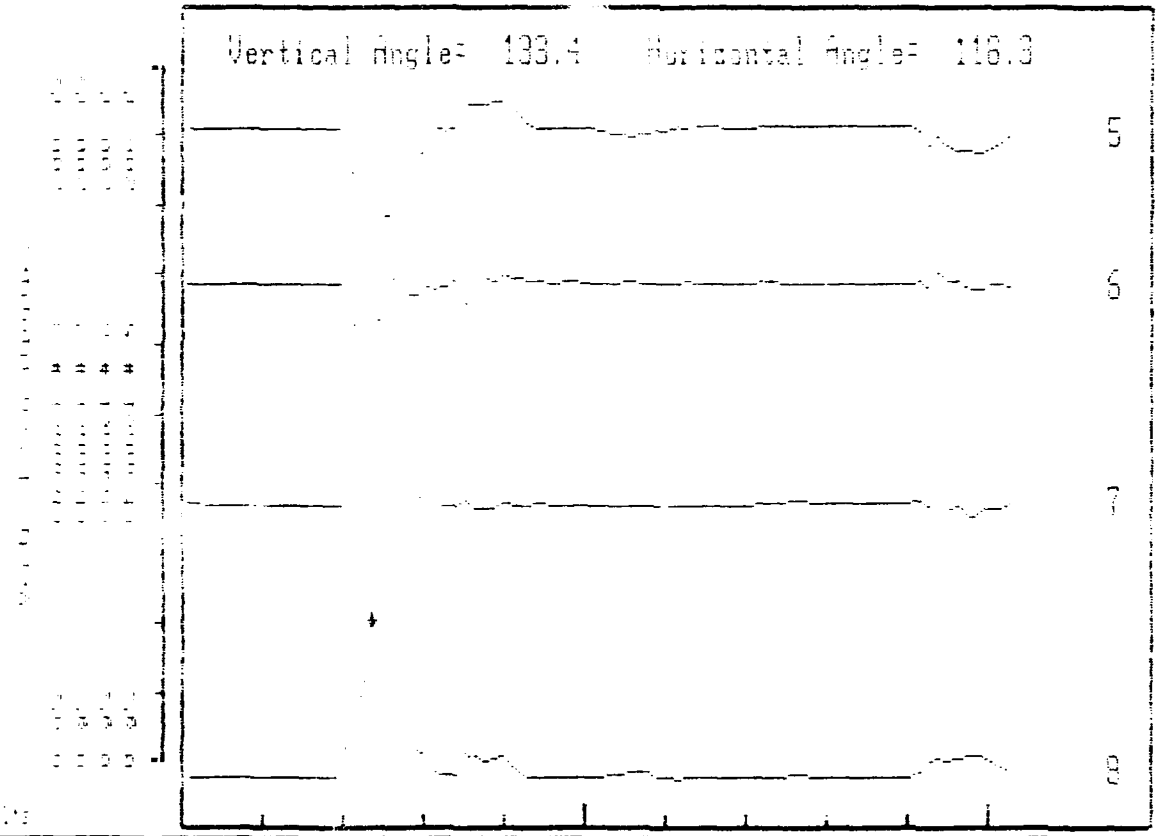
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	58.88mS	-32.81 g's	-32.81 g's	-81.91 In/s		256mS	1
6	58.88mS	-14.84 g's	-14.84 g's	-28.43 In/s		256mS	1
7	58.88mS	21.09 g's	27.34 g's	75.73 In/s		256mS	1
8	58.88mS	40.62 g's	40.62 g's	94.90 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible], Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In., Amb. Temperature, Corner 1-2-5, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant. Filtered LP 125 Hz -3 db.

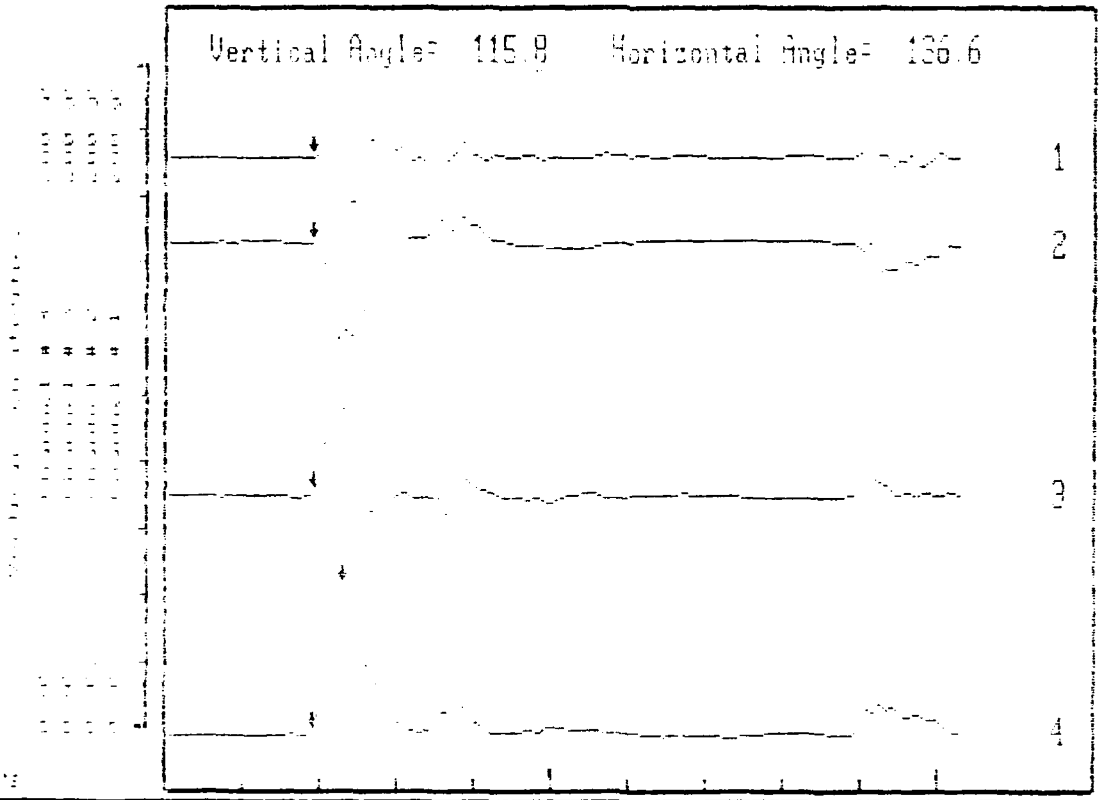
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50 g's/volt	[illegible] g's/volt	50 g's/volt	50 g's/volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	9.727mS	-18.75 g's	-18.75 g's	-26.27 In/s		256mS	1
2	9.727mS	-28.12 g's	-29.68 g's	-64.29 In/s		256mS	1
3	9.727mS	26.56 g's	26.56 g's	40.49 In/s		256mS	1
4	9.727mS	42.96 g's	42.96 g's	67.39 In/s		256mS	1

Remarks

High Explosive [illegible] Shipping and Storage Container [illegible], Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In., Amb. Temperature, Corner 1-2-5, Upper Starboard Accelerometer: Ch 1 - Vert., [illegible], Ch 4 - Resultant, Filtered LP 125 Hz [illegible].

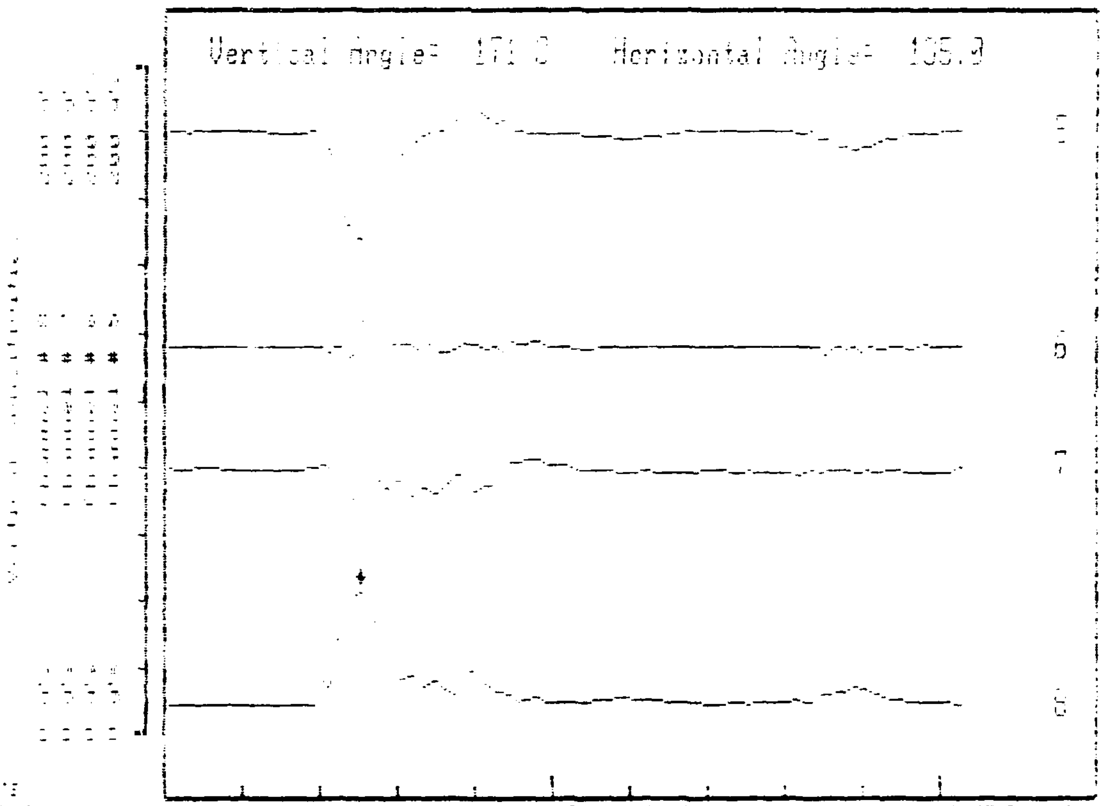
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: [illegible]

Measurement Constants:

	[illegible]	[illegible]	[illegible]	[illegible]
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	62.97mS	-32.03 g's	-32.03 g's	-109.1 In/s		256mS	1
6	62.97mS	7.031 g's	7.031 g's	-2.163 In/s		256mS	1
7	62.97mS	1.562 g's	-10.93 g's	-29.36 In/s		256mS	1
8	62.97mS	33.59 g's	33.59 g's	107.2 In/s		256mS	1

Remarks

High Explosive [illegible] Shipping and Storage Container [illegible], Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure [illegible] Height [illegible] In, Amb. Temperature, Forward End Face 5, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered [illegible]

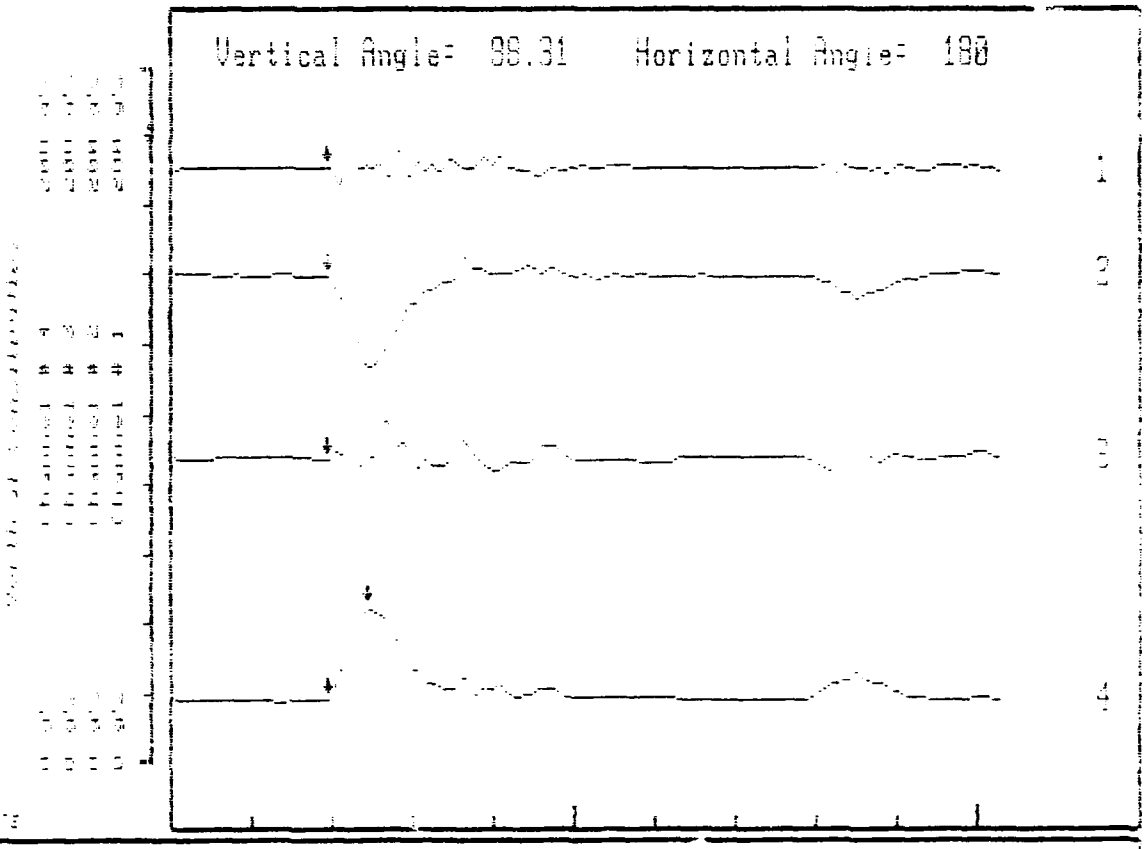
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

Transducer Output	5[illegible]	5[illegible]	5[illegible]	5[illegible]
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	DUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	12.8mS	.7812 g's	7.031 g's	2.473 in/s		256mS	1
2	12.8mS	-26.56 g's	-26.56 g's	-74.19 in/s		256mS	1
3	12.8mS	0 g's	-7.812 g's	-13.91 in/s		256mS	1
4	12.8mS	25.78 g's	25.78 g's	68.62 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (MU-480(E)), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 48 in, Amb. Temperature, Forward End Face D, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered @ 120 Hz -7 db.

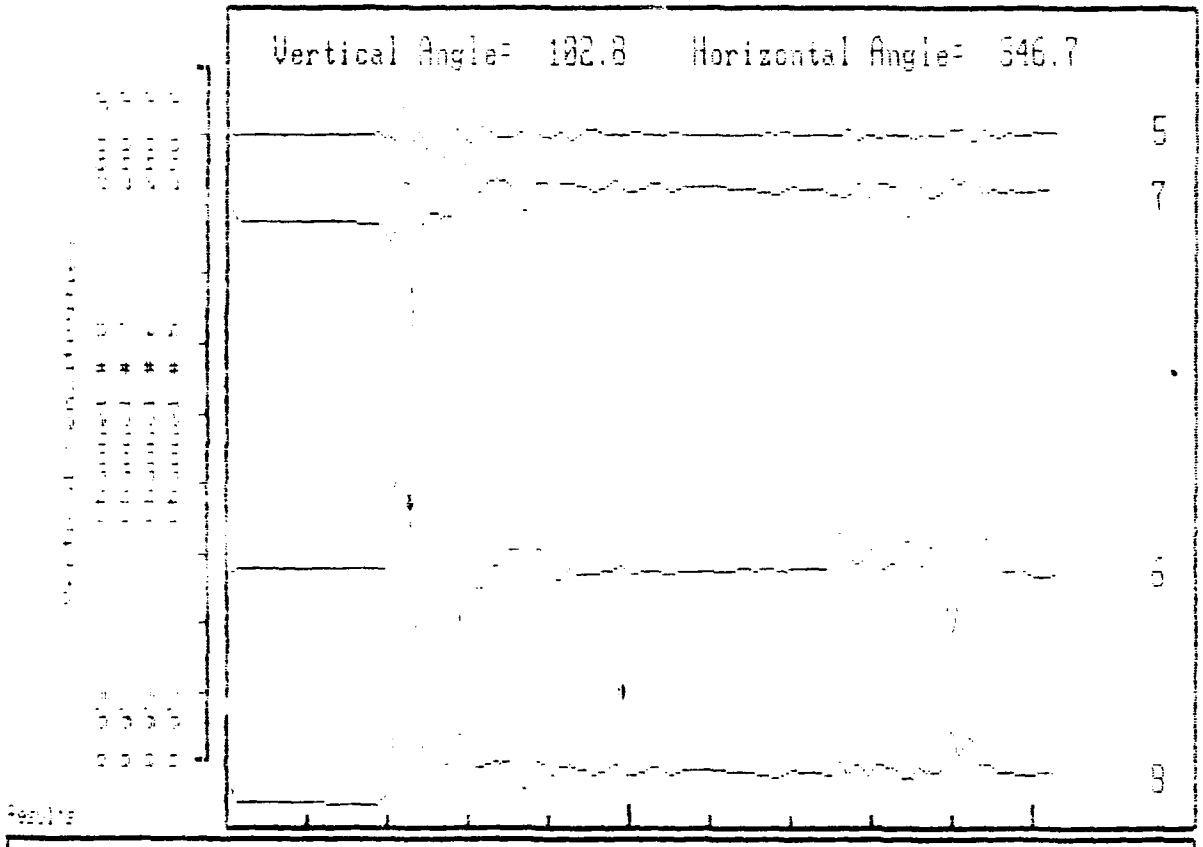
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	10g's/volt	100g's/volt	10g's/volt	100g's/volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	56.83mS	-2.343 g's	6.25 g's	-28.13 in/s		256mS	1
6	56.83mS	81.25 g's	81.25 g's	114.6 in/s		256mS	1
7	56.83mS	11.71 g's	12.5 g's	44.82 in/s		256mS	1
8	56.83mS	82.03 g's	82.03 g's	129.5 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5.07, Free Fall Drop Test, Procedure G, Drop Height 18 in, Amb. Temperature, Bottom Face 3, Lower Port Accelerometer: Ch 5 - Long, Ch 6 Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 125 Hz -3 db.

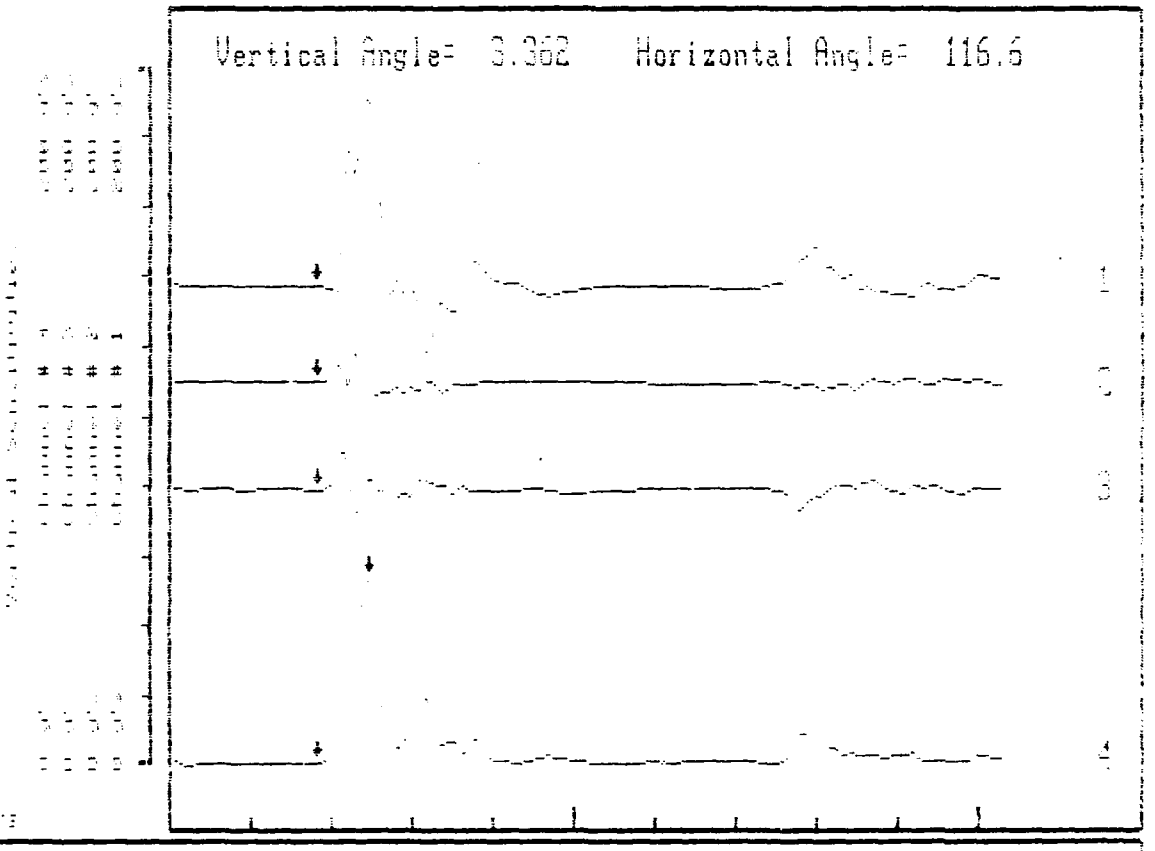
Waveform Test Report

AFPEA: HQ AFLC/DBTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-13-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	50g's/volt	50g's/volt	50g's/volt	50g's/volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	16.38mS	53.12 g's	53.12 g's	136.3 in/s		256mS	1
2	16.38mS	-1.562 g's	8.593 g's	13.60 in/s		256mS	1
3	16.38mS	3.125 g's	10.93 g's	19.78 in/s		256mS	1
4	16.38mS	53.12 g's	53.12 g's	170.0 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 in, Amb. Temperature, Bottom Face 3, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP 125 Hz -3 db.

9 of 4

Test Sequence 22, Fed-Std-101C, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, Ambient Temperature, 18 Inch Drop Height, Filtered 290 Hz L.P.

Container Orientation Accelerometer	Peak Acceleration Vertical Gp	Transverse Gp	Longitudinal Gp	Resultant Gp
Bottom(3)				
Lower Port	80.5	0.8	7.0	80.5
Upper Starboard	70.3	3.9	2.3	70.3
Port Side(2)				
Lower Port	5.5	80.5	3.1	80.5
Upper Starboard	6.2	97.6	4.7	97.6
Corner 2-3-6				
Lower Port	16.4	9.4	39.1	43.0
Upper Starboard	23.4	23.4	20.3	38.3
Corner 1-4-5				
Lower Port	18.8	21.9	36.7	46.1
Upper Starboard	21.9	24.2	35.2	46.1
Top(1)				
Lower Port	48.4	17.2	1.6	50.8
Upper Starboard	60.2	27.3	6.2	64.8
Corner 3-4-6				
Lower Port	27.3	25.8	33.6	50.0
Upper Starboard	9.4	28.9	26.6	39.1
Corner 1-2-5				
Lower Port	20.3	25.0	38.3	48.4
Upper Starboard	24.2	35.9	27.3	50.0
Forward End(5)				
Lower Port	14.8	5.5	33.6	36.7
Upper Starboard	1.6	0.8	27.3	26.6
Bottom(3) 2 nd Drop				
Lower Port	99.2	4.7	3.9	99.2
Upper Starboard	57.0	7.0	5.5	57.8

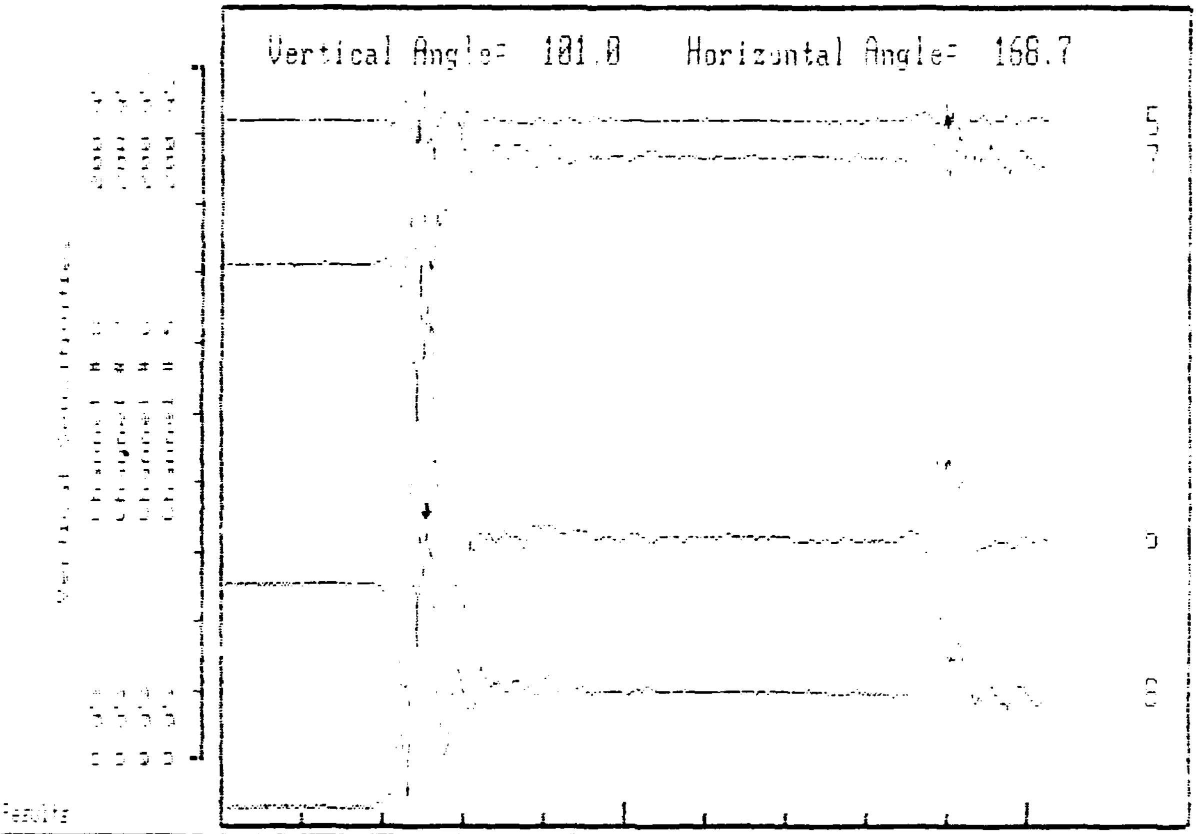
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50 g's/Volt	50 g's/Volt	50 g's/Volt	50 g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	63.48mS	-7.031 g's	-10.15 g's	2.473 In/s		256mS	1
6	63.48mS	80.46 g's	81.25 g's	102.0 In/s		256mS	1
7	63.48mS	-.7812 g's	14.84 g's	9.273 In/s		256mS	1
8	63.48mS	80.46 g's	82.03 g's	179.9 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-460/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure 3, Drop Height 18 In. Amb. Temperature, Bottom Face 3, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 290 Hz -3 db/o

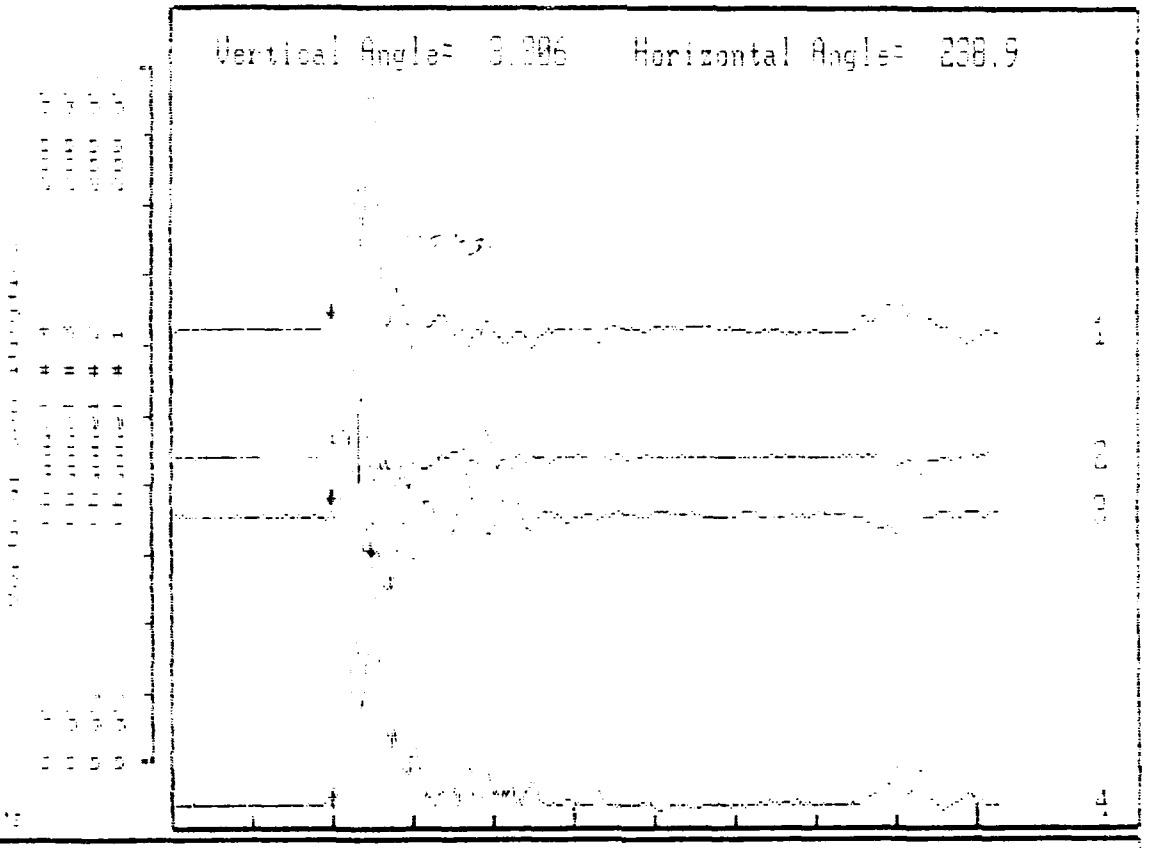
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

Transducer Sensit				
1st Integral Scaler				
2nd Integral Scaler				



CH	TIME	DUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	12.28mS	70.31 g's	70.31 g's	73.26 In/s		256mS	1
2	12.28mS	-2.343 g's	19.53 g's	19.47 In/s		256mS	1
3	12.28mS	-3.906 g's	42.18 g's	15.76 In/s		256mS	1
4	12.28mS	67.96 g's	67.96 g's	122.7 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Amb, Temperature, Bottom Face 7, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 Resultant, Filtered LP 230 Hz -3 db.

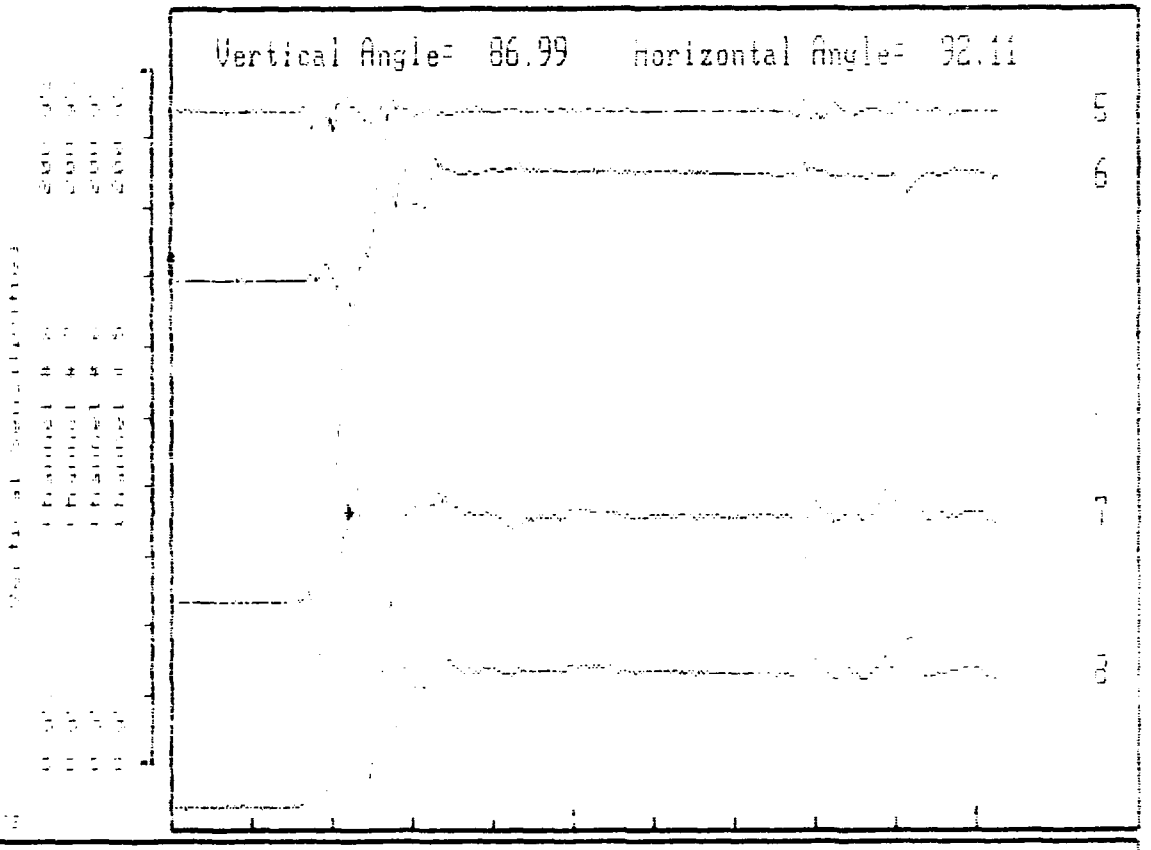
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

Transducer Data	[illegible] g/Volt	[illegible] g/Volt	[illegible] g/Volt	[illegible] g/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	54.78mS	3.125 g's	8.593 g's	-7.109 In/s		256mS	1
6	54.78mS	-5.468 g's	-5.468 g's	2.782 In/s		256mS	1
7	54.78mS	80.46 g's	81.25 g's	112.8 In/s		256mS	1
8	54.78mS	80.46 g's	81.25 g's	165.0 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container CNU-480/E, Mod-Std-101, Method 5307, Free Fall Drop Test, Procedure G, Drop Height 15 In, Amb. Temperature, Side Face 2, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 2?) Hz -3 db.

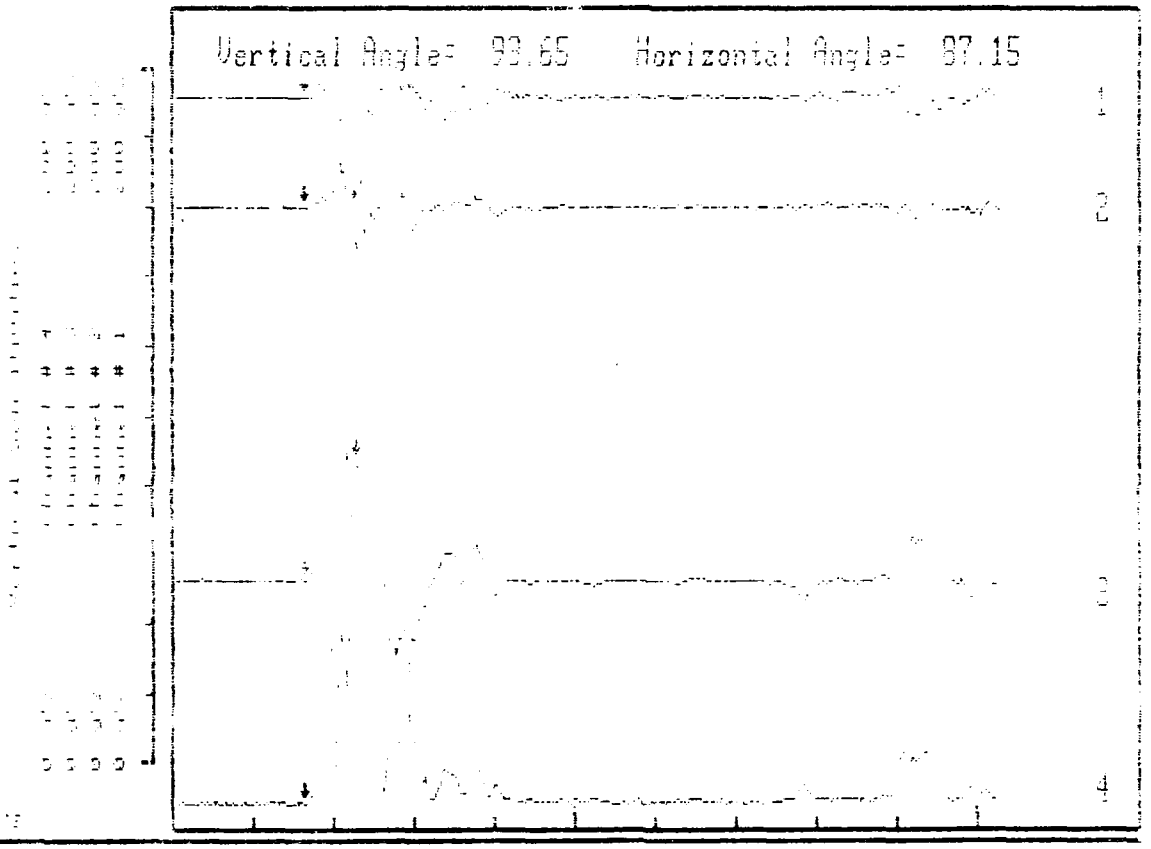
Waveform Test Report

AFPEA; HQ AFLC/DBTZ, TRIAD II-E

Test Item: AF PACKAGING EVAL AGENCY Date of Test: OCT-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	16.38mS	-6.35 g's	13.28 g's	12.67 In/s		256mS	1
2	16.38mS	4.687 g's	14.06 g's	17.62 In/s		256mS	1
3	16.38mS	97.65 g's	98.43 g's	110.3 In/s		256mS	1
4	16.38mS	97.65 g's	98.43 g's	190.4 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Amb. Temperature, Side Face 2, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Longitudinal, Filtered LP 290 Hz -3db.

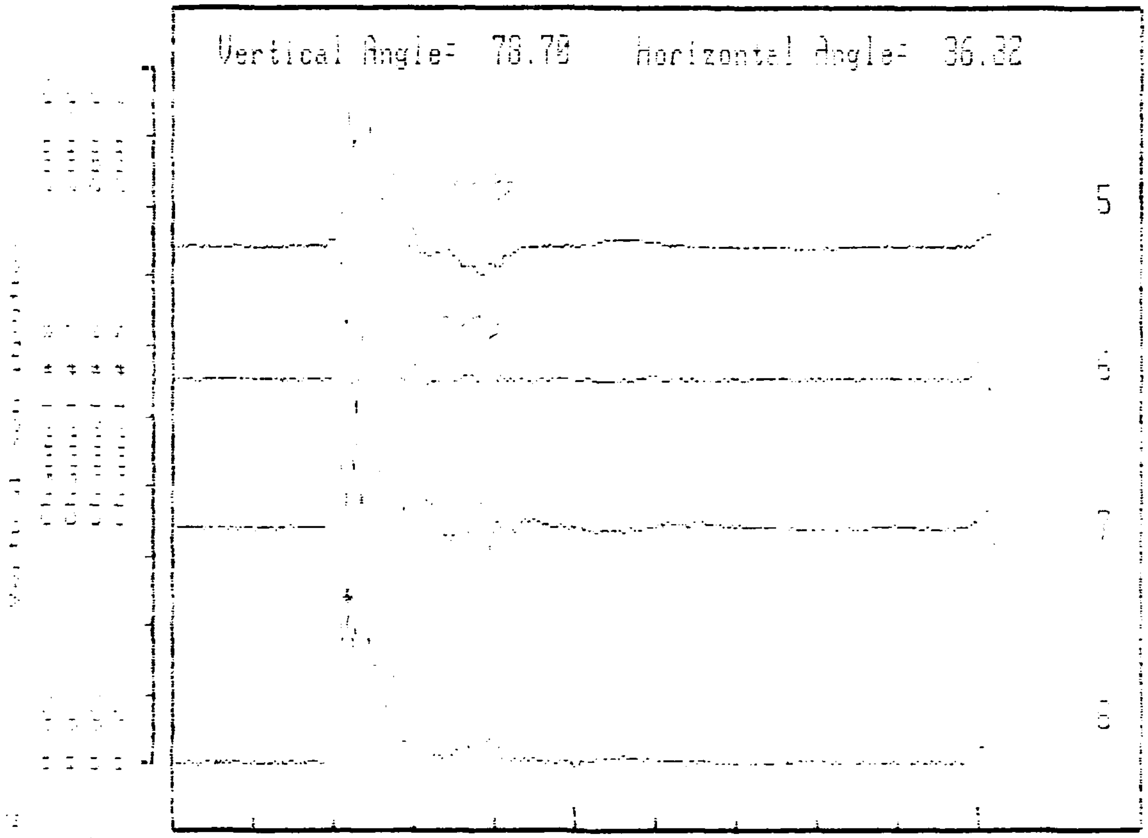
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	54.27mS	39.06 g's	39.84 g's	39.25 In/s		256mS	1
6	54.27mS	16.40 g's	36.71 g's	48.84 In/s		256mS	1
7	54.27mS	9.375 g's	23.43 g's	32.45 In/s		256mS	1
8	54.27mS	42.96 g's	43.75 g's	70.17 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-[illegible]), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure [illegible], Drop Height [illegible], Amb. Temperature, Corner [illegible], Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered [illegible] Hz -3 db.

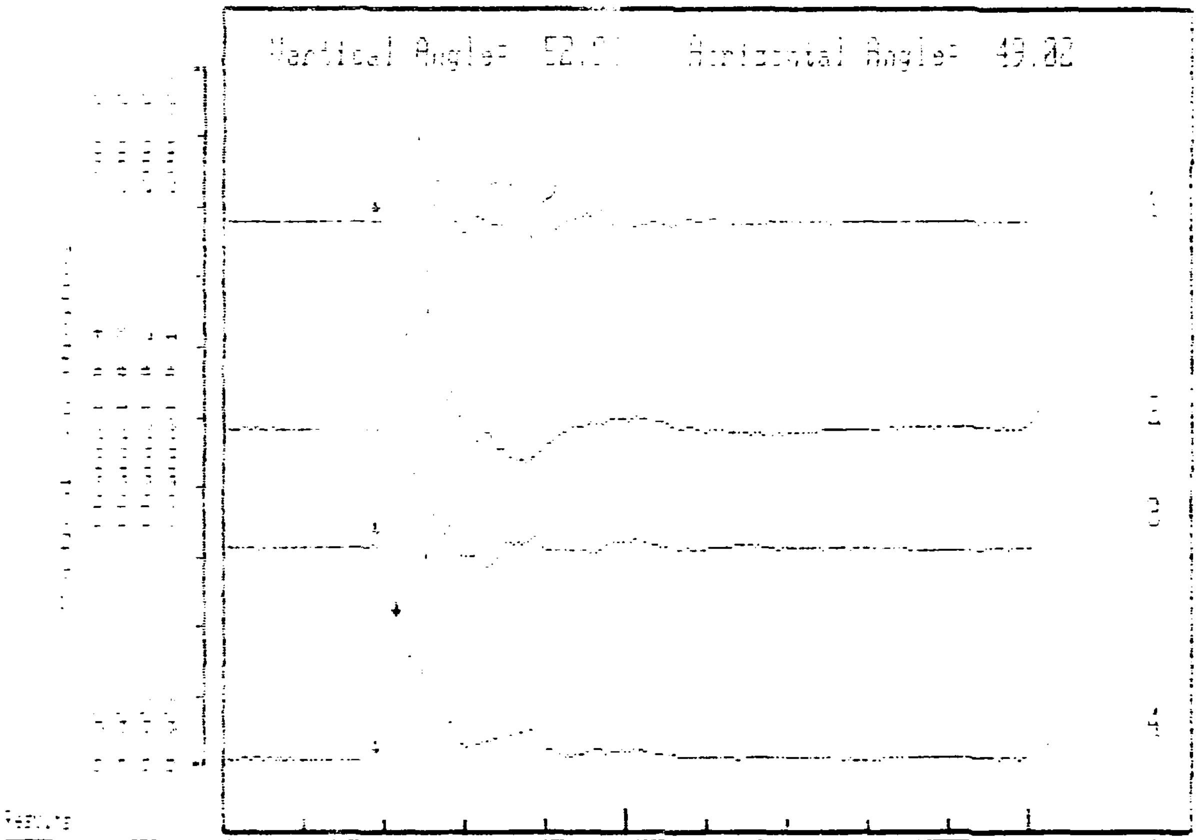
Waveform Test Report

AFPEA, HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants: [illegible]

[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	6.656mS	23.43 g's	23.43 g's	16.07 In/s		256mS	1
2	6.656mS	20.31 g's	21.09 g's	19.47 In/s		256mS	1
3	6.656mS	23.4[illegible] g's	24.21 g's	6.800 In/s		256mS	1
4	6.656mS	38.[illegible] g's	38.28 g's	34.31 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-[illegible]/E), Fed-Std-101, Method [illegible], Free Fall Drop Test, Procedure B, Drop Height 18 In., Amb. Temperature, Corner 2-3-6, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP [illegible]

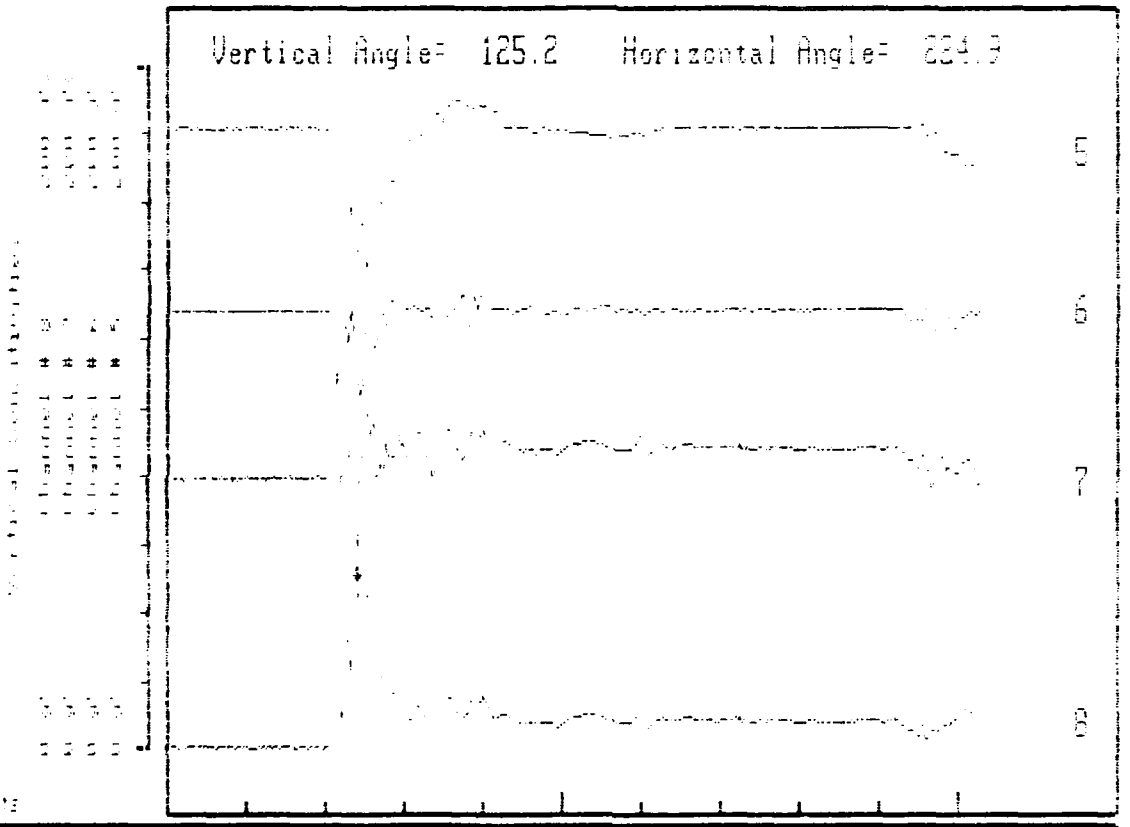
Waveform Test Report

AFPEA; HQ AFLC/DBTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENC Date of Test: 03-10-1990

Measurement Constants:

Transducer Data:				
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	59.90mS	-36.71 g's	-36.71 g's	-64.91 in/s		256mS	1
6	59.90mS	-18.75 g's	-22.65 g's	-49.46 in/s		256mS	1
7	59.90mS	-21.87 g's	-22.65 g's	-14.83 in/s		256mS	1
8	59.90mS	46.09 g's	46.09 g's	91.50 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure A, Drop Height 18 in, Amb. Temperature, Corner 1-4-5, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 290 Hz -3 db.

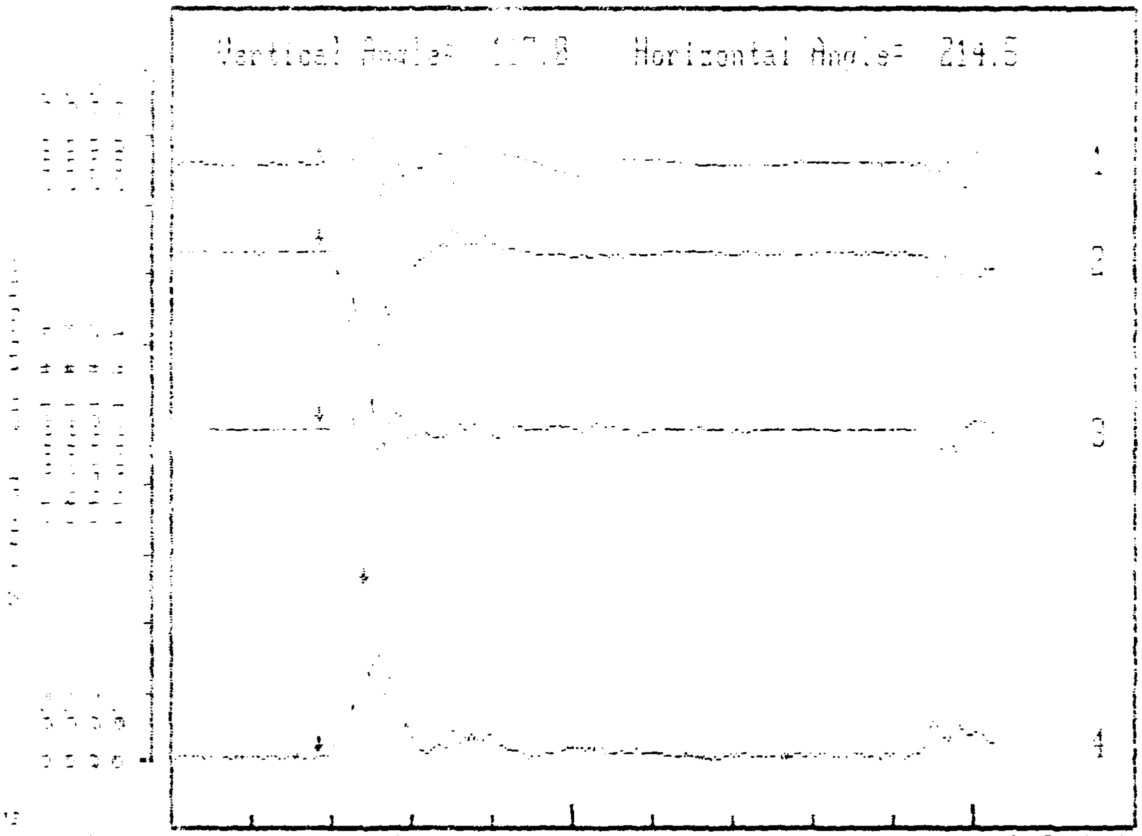
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF FACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants: [illegible]

[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	14.33mS	-21.87 g's	-21.87 g's	-22.25 In/s		256mS	1
2	14.33mS	-35.15 g's	-35.93 g's	-69.24 In/s		256mS	1
3	14.33mS	-24.21 g's	-32.81 g's	-56.42 In/s		256mS	1
4	14.33mS	46.09 g's	46.87 g's	73.89 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E). Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In. Amb. Temperature, Corner 1-4-5, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP 290 Hz -3 db.

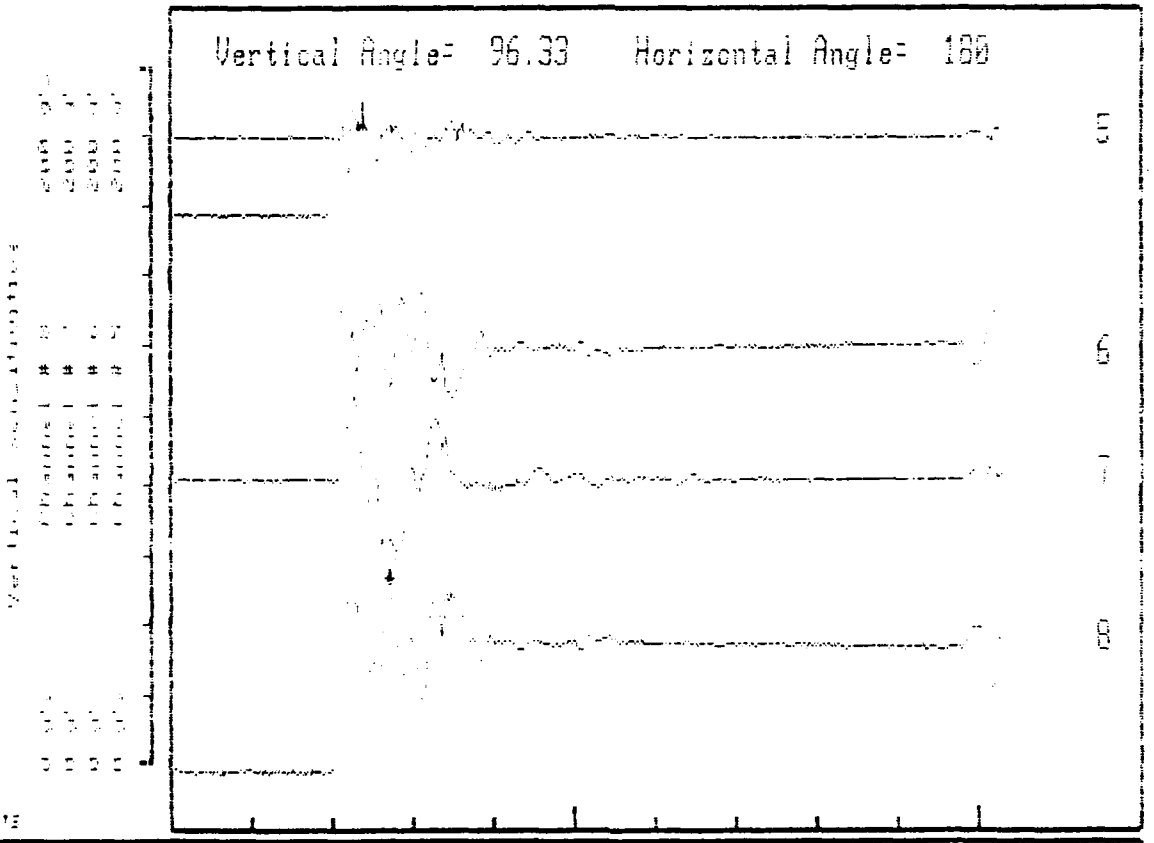
Waveform Test Report

AFPEA: HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50.g's-volt	51.g s/Volt	52.g's Volt	50.g s Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	68.09mS	1.562 g's	-10.93 g's	2.473 In/s		256mS	1
6	68.09mS	-48.43 g's	-48.43 g's	-234.3 In/s		256mS	1
7	68.09mS	-17.18 g's	25.78 g's	8.346 In/s		256mS	1
8	68.09mS	50.78 g's	50.78 g's	244.2 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure 6, Drop Height 18 In, Amb. Temperature, Top Face 1, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 290 Hz -3 db.

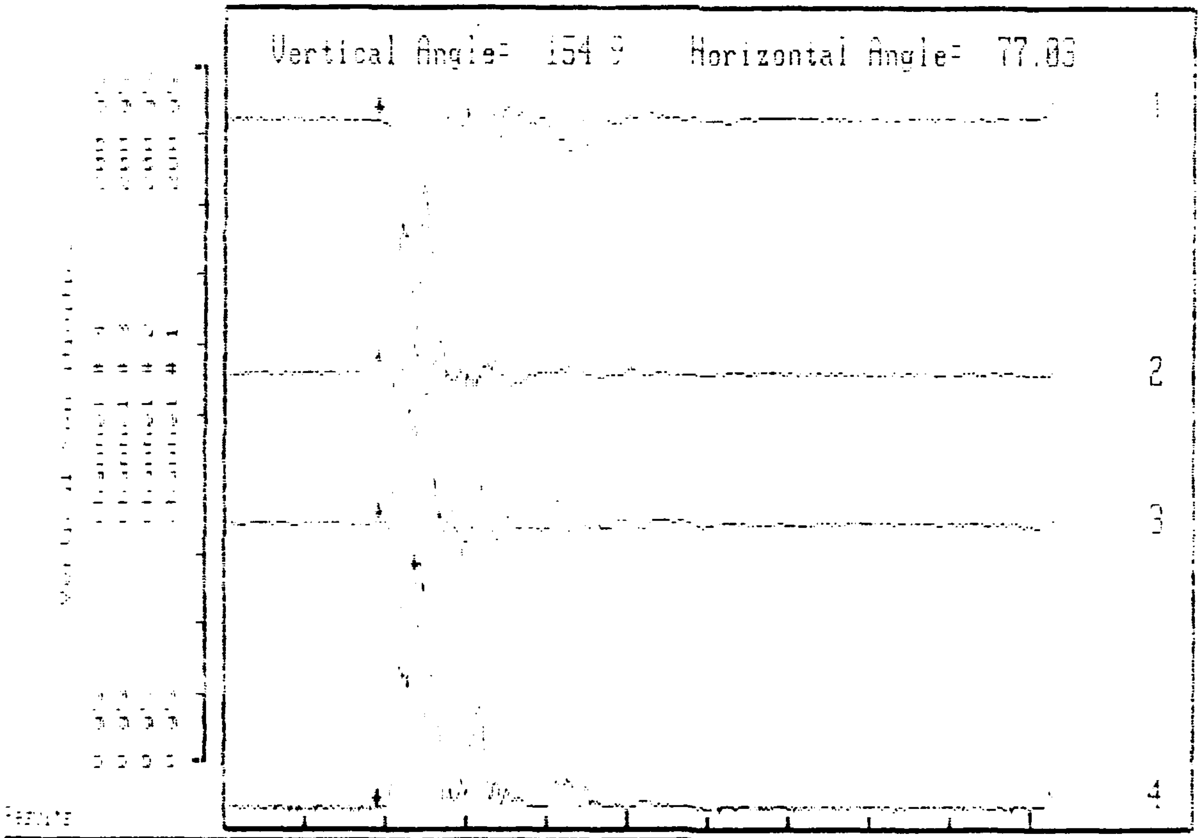
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 1	Ch # 2	Ch # 3	Ch # 4
Transducer Output	[illegible]	50.0 g's/volt	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	11.77mS	-60.15 g's	-60.93 g's	-101.3 In/s		256mS	1
2	11.77mS	6.25 g's	-11.71 g's	-6.800 In/s		256mS	1
3	11.77mS	27.34 g's	30.46 g's	7.109 In/s		256mS	1
4	11.77mS	64.84 g's	66.48 g's	104.1 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In, Amb. Temperature, Top Face 1, Upper Starboard Accelerometer: Ch 1 -Vert, Ch 2 Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP 290 Hz -3 db.

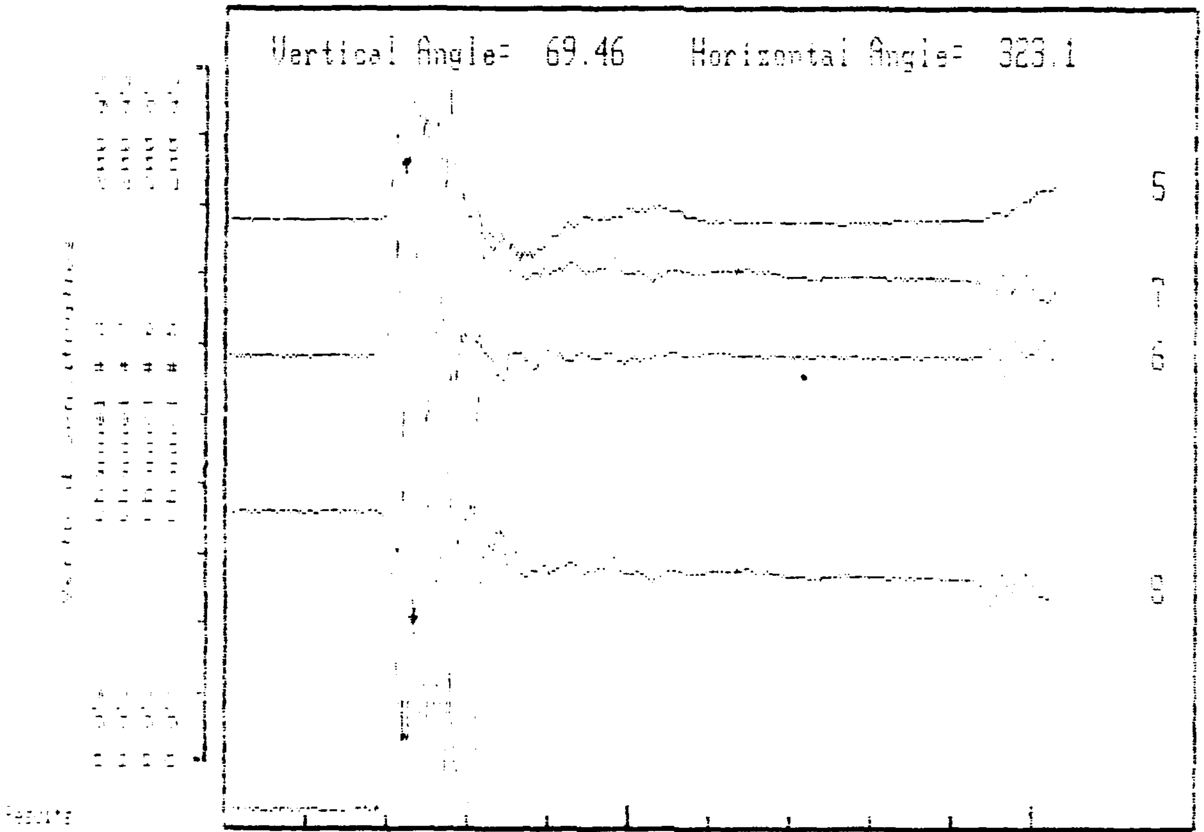
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 03-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Output	50 g's/Volt	50 g's/Volt	50 g's/Volt	50 g's/Volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	58.36mS	33.59 g's	34.37 g's	65.22 In/s		256mS	1
6	58.36mS	27.34 g's	33.59 g's	32.76 In/s		256mS	1
7	58.36mS	-25.78 g's	-27.34 g's	-51.31 In/s		256mS	1
8	58.36mS	50 g's	50 g's	102.6 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E) Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure G, Drop Height 18 In. Amb. Temperature, Corner 2-4-5, Lower Port Accelerometer; Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 290 Hz -3db.

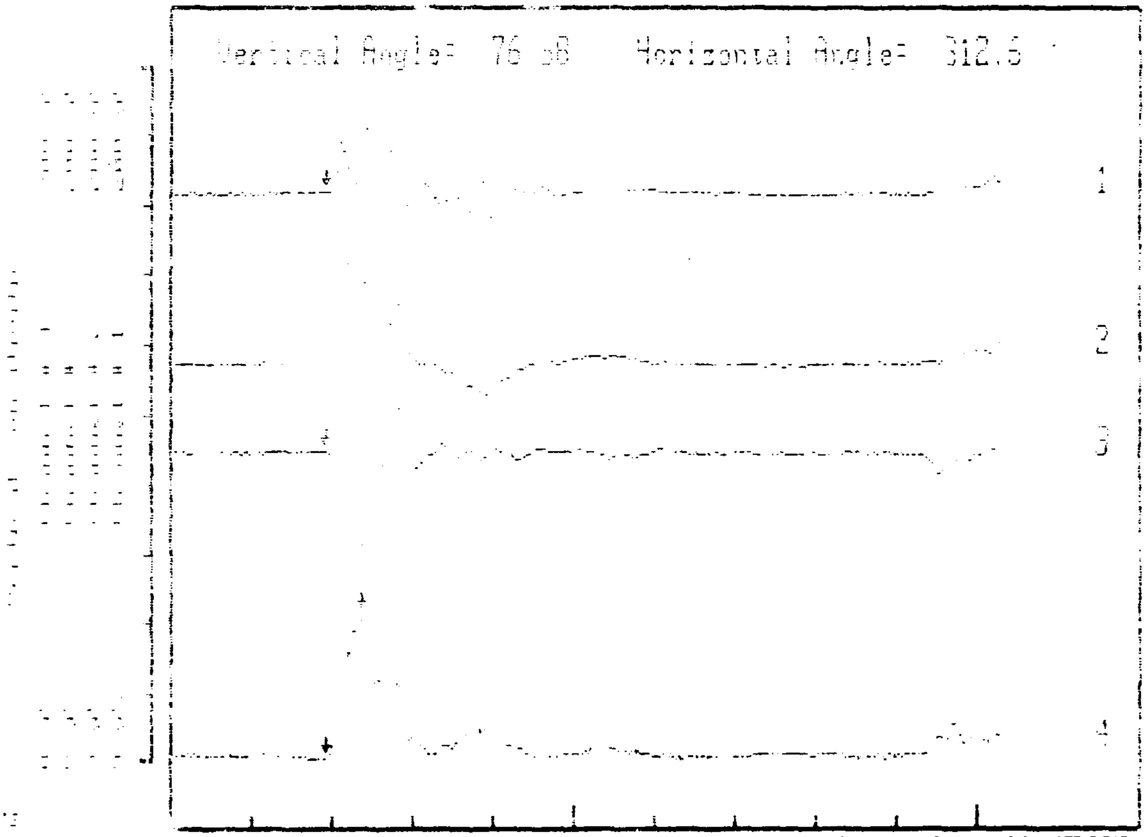
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: [illegible]

Measurement Constants: [illegible]

Transducer Output	[illegible]	[illegible]	[illegible]	[illegible]
1st Integral Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integral Scaler		[illegible]	[illegible]	[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	11.26mS	9.375 g's	15.62 g's	14.21 In/s		256mS	1
2	11.26mS	26.56 g's	36.71 g's	77.28 In/s		256mS	1
3	11.26mS	-28.90 g's	-28.90 g's	-52.24 In/s		256mS	1
4	11.26mS	39.06 g's	39.06 g's	77.28 In/s		256mS	1

Remarks

High Explosive Anti Armor Rocket Shipping and Storage Container [illegible]
Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In.
Amb. Temperature, Corner [illegible], Upper Starboard Accelerometer: Ch 1 - Vert,
Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP [illegible] Hz [illegible] db.

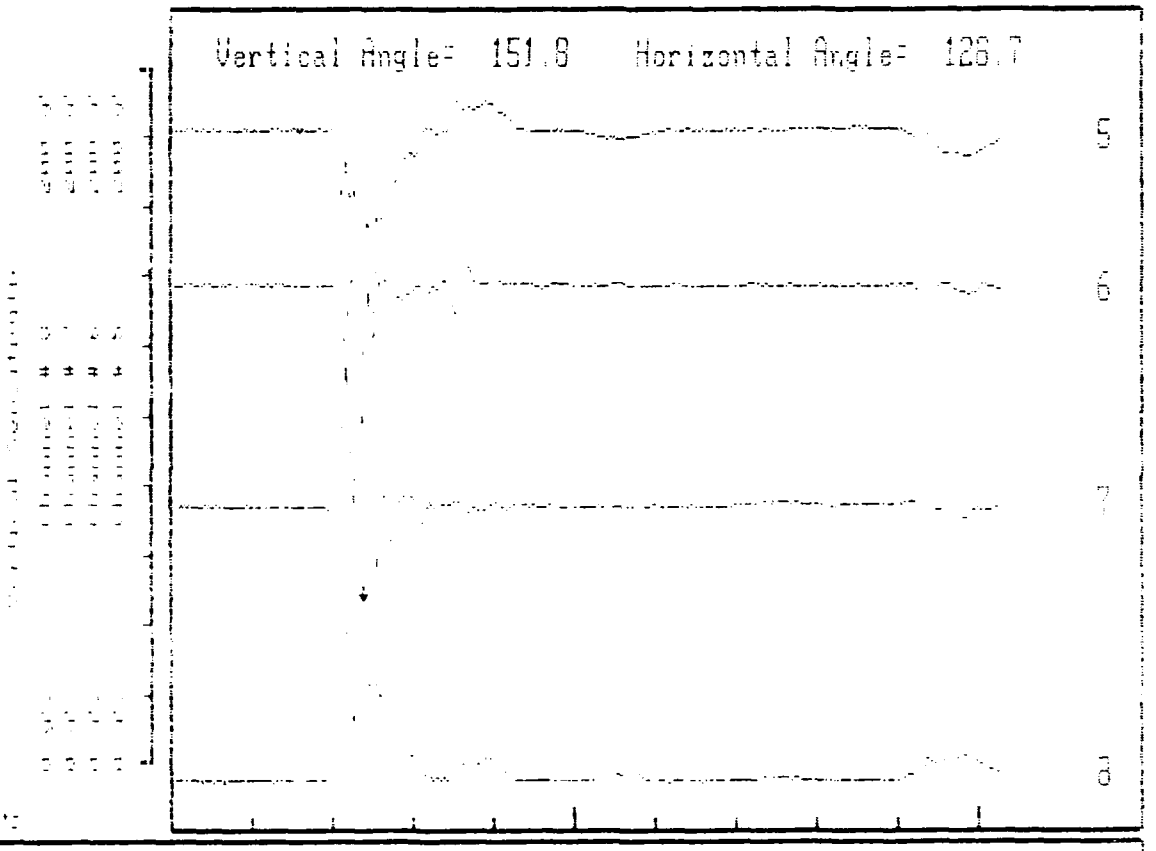
Waveform Test Report

AFPEA: HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 07-10-1990

Measurement Constants:

	Ch # 5	Ch # 6	Ch # 7	Ch # 8
Transducer Scale	50g's volt	50g's volt	50g's volt	50g's volt
1st Integral Scaler	386.4	386.4	386.4	386.4
2nd Integral Scaler	1	1	1	1



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	59.39mS	-38.28 g's	-39.06 g's	-84.39 In/s		256mS	1
6	59.39mS	-20.31 g's	-20.31 g's	-26.27 In/s		256mS	1
7	59.39mS	25 g's	41.40 g's	81.30 In/s		256mS	1
8	59.39mS	48.43 g's	50 g's	100.4 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible], Fed-Std-101, Method 5007, Tree Fall Drop Test, Procedure 3, Drop Height 48 In. Amb. Temperature, Corner 1-2-3, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP 200 Hz -3 db.

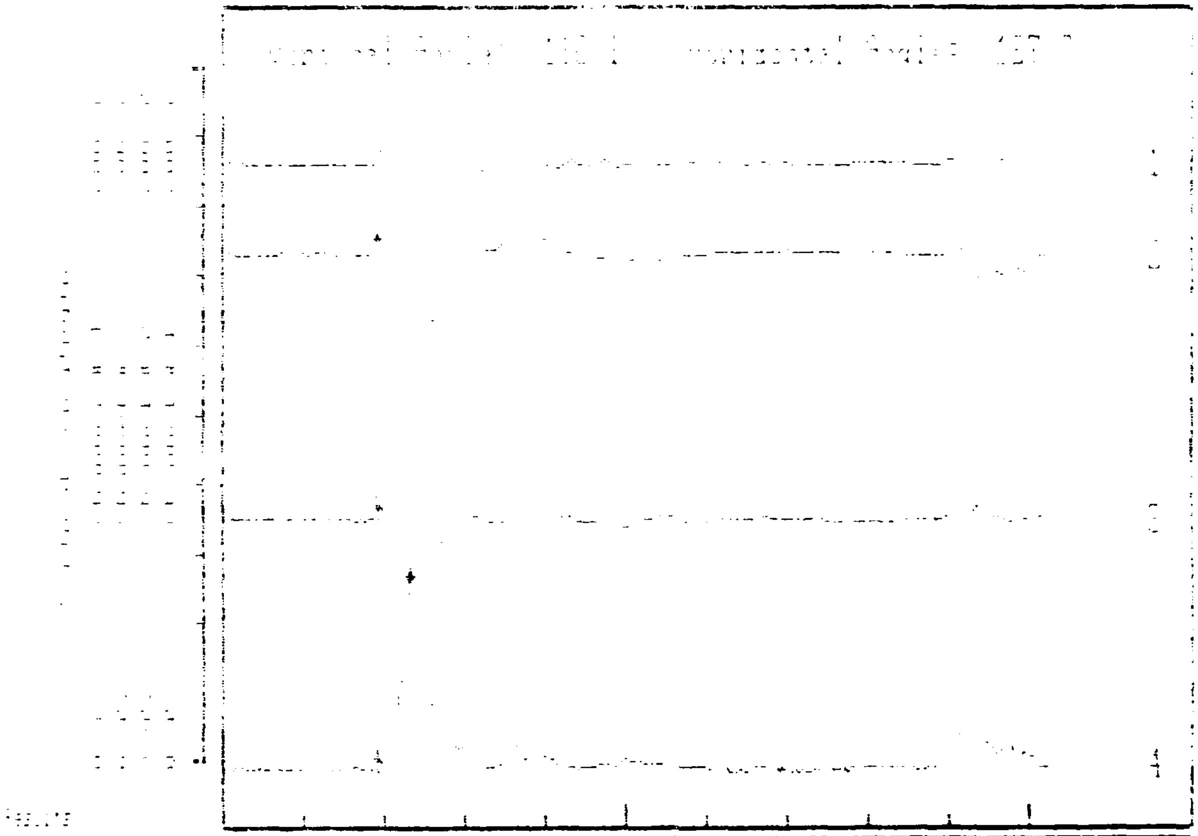
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING [illegible] Date of Test: [illegible]

Measurement Constants [illegible]

[illegible]



Results

CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	10.24mS	-24.21 g's	-25 g's	-25.96 In/s		256mS	[illegible]
2	10.24mS	-27.34 g's	-35.93 g's	-70.17 In/s		256mS	1
3	10.24mS	35.93 g's	36.71 g's	44.20 In/s		256mS	1
4	10.24mS	50 g's	50.78 g's	76.66 In/s		256mS	1

Remarks

High Explosive Anti-[illegible] Rocket Shipping and Storage Container [illegible], Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In. Amb. Temperature, Corner [illegible], [illegible] Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered at [illegible] Hz -3 db.

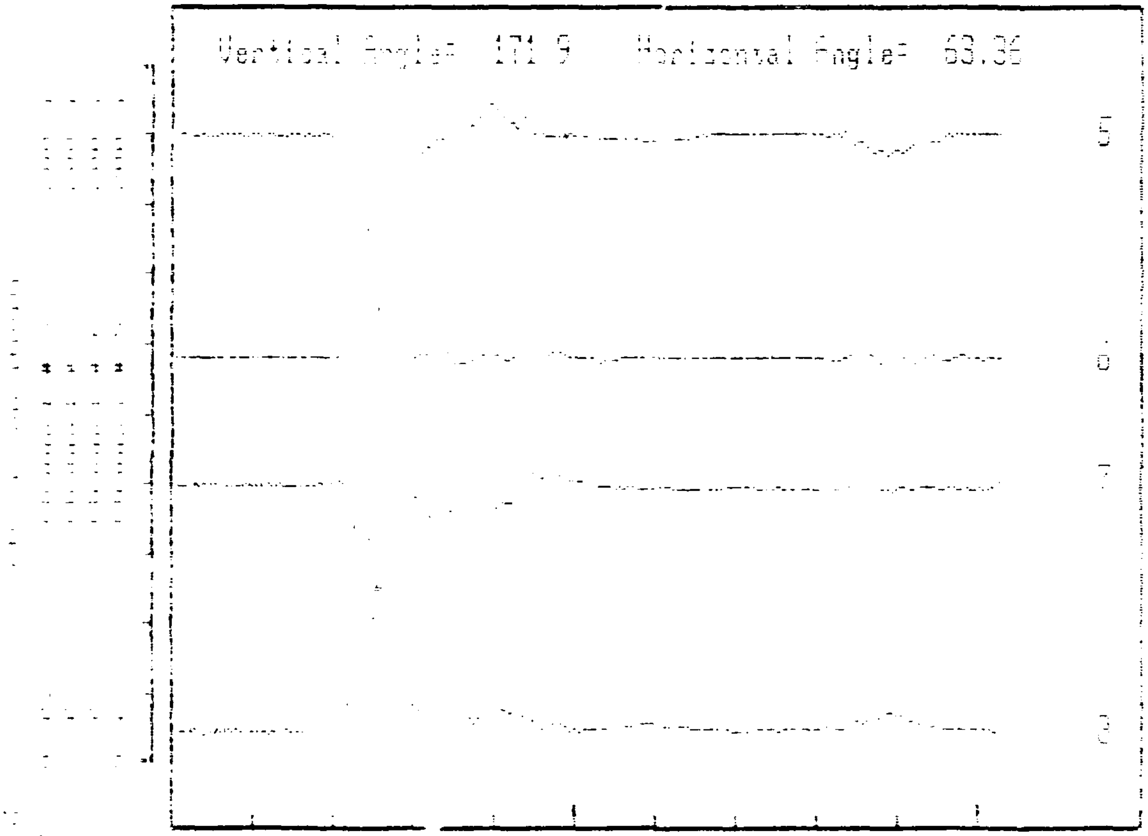
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 07-10-1990

Measurement Constants:

	Ch 5	Ch 6	Ch 7	Ch 8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1st Integ. Scaler	[illegible]	[illegible]	[illegible]	[illegible]
2nd Integ. Scaler			[illegible]	[illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	64mS	-33.59 g's	-34.37 g's	-124.5 In/s		256mS	1
6	64mS	14.84 g's	14.84 g's	1.854 In/s		256mS	1
7	64mS	5.468 g's	-17.96 g's	-27.51 In/s		256mS	1
8	64mS	36.71 g's	36.71 g's	123.3 In/s		256mS	1

Remarks

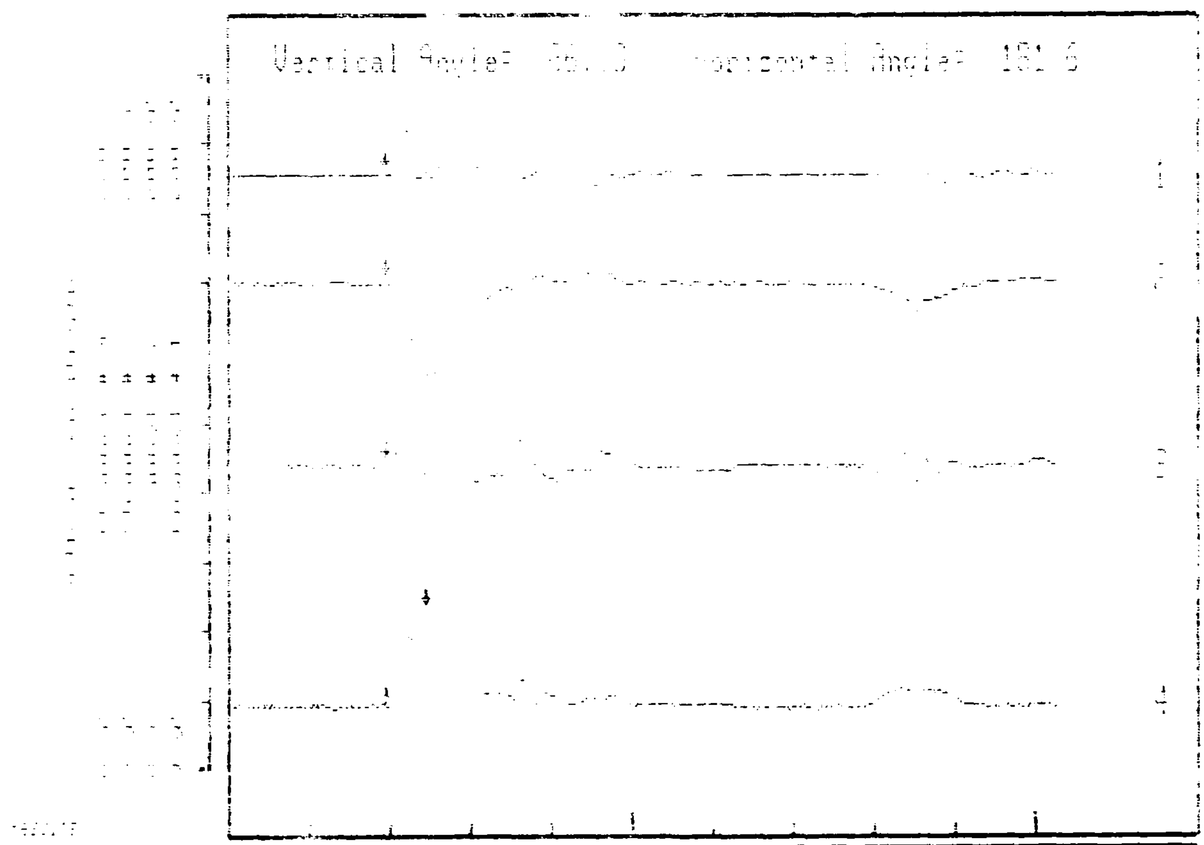
High Explosive Anti-Armor Rocket Shipping and Storage Container [illegible], Fed-Std-101, Method [illegible], Free Fall Drop Test, Procedure 3, Drop Height 18 In, Amb. Temperature, Forward End Face 5, Lower Port Accelerometer: Ch 5 - Long, Ch 6 - Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered LP [illegible] Hz [illegible] db.

Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY   Date of Test: 0[illegible]-1990

Measurement Constants: [illegible]



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	12.8mS	1.562 g's	14.06 g's	2.473 In/s		256mS	1
2	12.8mS	-27.34 g's	-27.34 g's	-72.33 In/s		256mS	1
3	12.8mS	-.7812 g's	-12.5 g's	-17.88 In/s		256mS	1
4	12.8mS	26.56 g's	26.56 g's	73.79 In/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-420/E), Fed-Std-101, Method 5007, Free Fall Drop Test, Procedure B, Drop Height 18 In, Amb. Temperature, Forward End Face 5, Upper Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered LP 290 Hz -3 db.

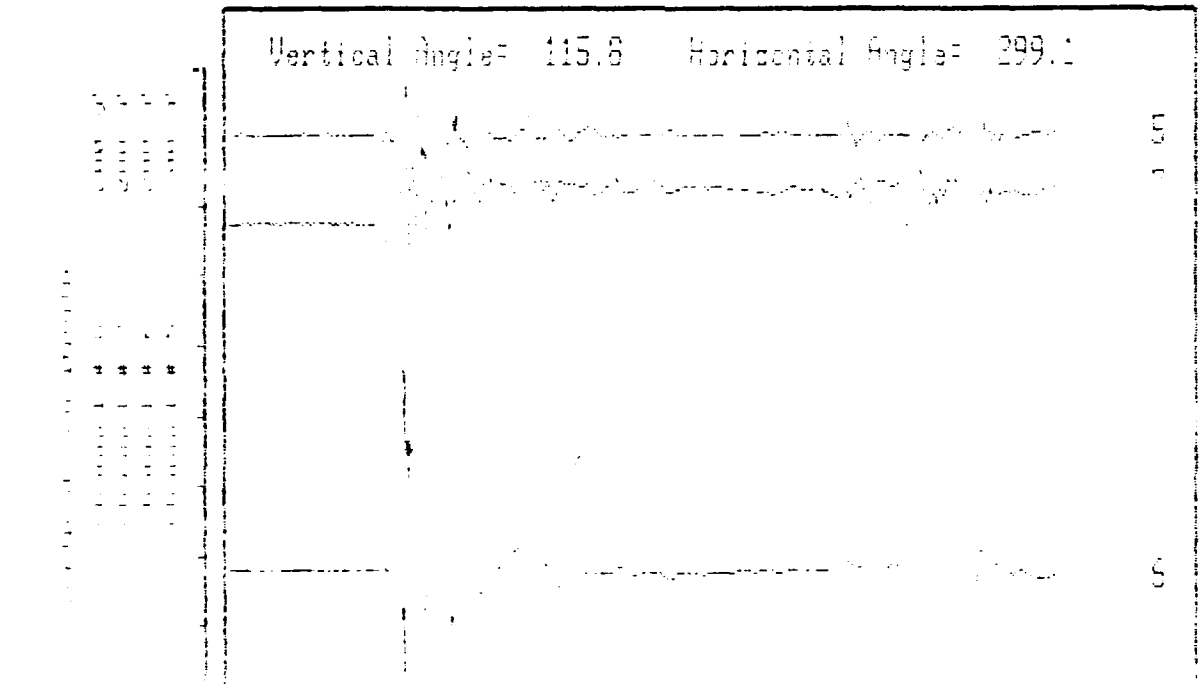
12.10.16

Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 07-10-1990

Measurement Constants:



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
5	56.83mS	-3.906 g's	25.78 g's	-23.88 in/s		256mS	1
6	56.83mS	99.21 g's	100 g's	110.6 in/s		256mS	1
7	56.83mS	4.687 g's	19.53 g's	37.71 in/s		256mS	1
8	56.83mS	97.65 g's	99.21 g's	121.7 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container (CNU-480/E, Mil-Std-[illegible], Method 5[illegible], Free Fall Drop Test, Procedure 6, Drop Height 18 In, Amb. Temperature, Bottom Face 3, Lower Port Accelerometer: Ch 5 - Long, Ch 6 Vert, Ch 7 - Trans, Ch 8 - Resultant, Filtered @ 200 Hz -3 db.

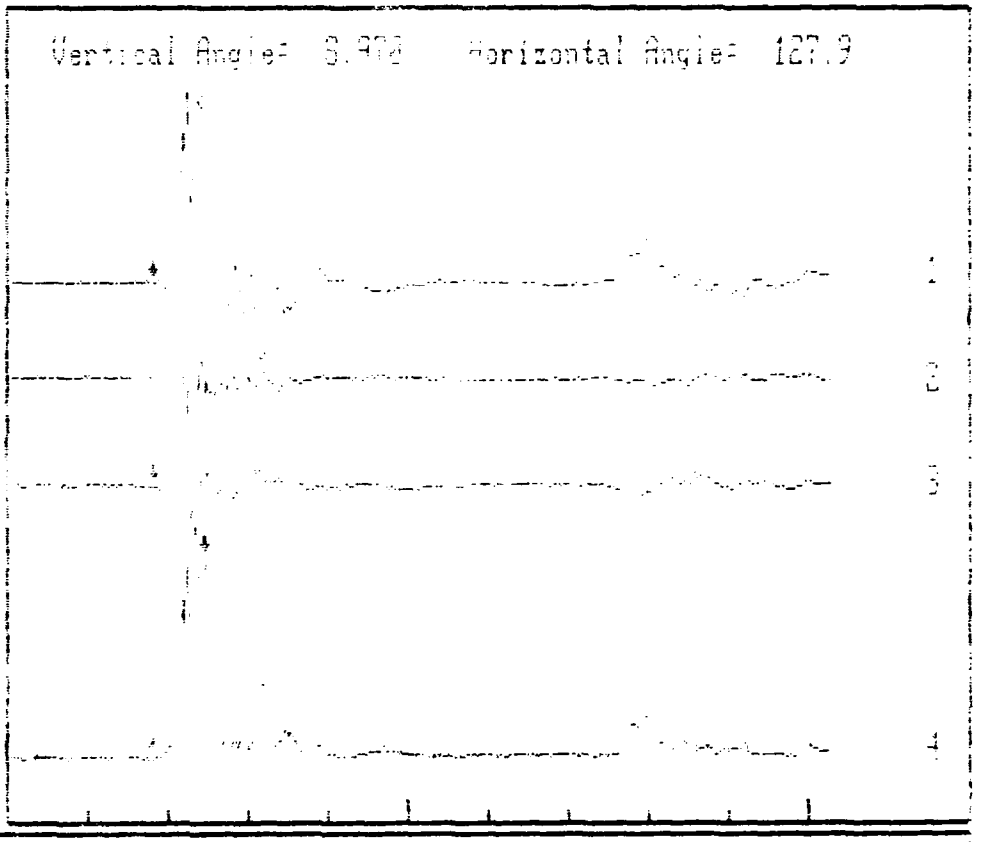
Waveform Test Report

AFPEA; HQ AFLC/DSTZ, TRIAD II-E

Test Ident: AF PACKAGING EVAL AGENCY Date of Test: 03-10-1992

Measurement Constants:

Transducer Output				
1st Integral Scaler				
2nd Integral Scaler				



CH	TIME	CUR AMP	PEAK AMP	1ST INT	2ND INT	TIME BASE	EXP
1	16.38mS	57.03 g's	57.03 g's	136.9 in/s		256mS	1
2	16.38mS	-5.468 g's	25 g's	14.52 in/s		256mS	1
3	16.38mS	7.031 g's	17.96 g's	17.31 in/s		256mS	1
4	16.38mS	57.81 g's	57.81 g's	168.4 in/s		256mS	1

Remarks

High Explosive Anti-Armor Rocket Shipping and Storage Container CNU-480/E, Red-Stencil 1, Method 5007, Free Fall Drop Test, Procedure I, Drop Height 18 In, Amb. Temperature, Bottom Face D, Accel Starboard Accelerometer: Ch 1 - Vert, Ch 2 - Long, Ch 3 - Trans, Ch 4 - Resultant, Filtered SAE CFC 60 -3 db.

12.10.18

9+h

Old Style SMAW Wood Container, Fed-Std-101, Method 5007.1, Free Fall Drop Test, 6.3, Procedure G, Ambient Temperature, 18 Inch Drop Height,

Container Orientation Accelerometer	Peak Acceleration Filtered 125 Hz Vert Gp	Trans Gp	Long Gp	Filtered 290 Hz Vert Gp	Trans Gp	Long Gp
Bottom(3)						
Lower Port	34.8	15.2	9.8	41.0	30.5	21.1
Upper Starboard	37.9	3.1	8.6	46.5	4.3	10.2
Port Side(2)						
Lower Port	4.3	36.7	6.6	9.8	41.0	14.1
Upper Starboard	24.2	28.5	6.6	28.1	32.8	12.5
Corner 2-3-6						
Lower Port	21.9	20.3	32.0			
Upper Starboard	20.3	14.1	27.3			
Corner 1-4-5						
Lower Port	10.2	13.3	25.8	12.5	14.8	27.3
Upper Starboard	21.9	10.2	21.1	25.0	10.9	24.2
Top(1)						
Lower Port	39.0	13.3	0.6	43.0	18.8	11.7
Upper Starboard	57.8	22.7	16.4	66.4	37.5	28.1
Corner 3-4-6						
Lower Port	10.9	14.1	29.7			
Upper Starboard	7.0	9.4	25.8			
Corner 1-2-5						
Lower Port	18.8	18.8	22.6			
Upper Starboard	22.6	19.5	30.5			
Forward End(5)						
Lower Port	2.7	2.3	16.4			
Upper Starboard	6.6	1.6	15.2			